

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 123875

TO: Anish Gupta

Location: rem/3c153d11

Art Unit: 1654

Monday, June 07, 2004

Case Serial Number: 09507166

From: Edward Hart

Location: Biotech-Chem Library

REM-1A55

Phone: 571-272-2512

edward.hart@uspto.gov

Search Notes

Examiner Gupta,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart





STIC SEARCH RESUL FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact the searcher or contact:

Mary Hale, Information Branch Supervisor 571-272-2507 Remsen E01 D86

Voluntary Results Feedback Form
Figure 1610 Example: 1610
> Relevant prior art found, search results used as follows:
102 rejection
103 rejection
Cited as being of interest.
Helped examiner better understand the invention.
Helped examiner better understand the state of the art in their technology
Types of relevant prior art found:
☐ Foreign Patent(s)
Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.)
> Relevant prior art not found:
Results verified the lack of relevant prior art (helped determine patentability).
Results were not useful in determining patentability or understanding the invention
Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library Remsen Bldg.



```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-507-166-38
786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             June 6, 2004, 22:15:00 ; Search time 4191 Seconds (without alignments) 6598.972 Million cell updates/sec
37577330 seqs, 17593059518 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pending
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 atggcttccggcagagaaga.....aagaacagcaggctagctaa 786
          Cgn2_6/ptodata/2/pna/US08_COMB.seq:*
Cgn2_6/ptodata/2/pna/US08_COMB.seq:*
Cgn2_6/ptodata/2/pna/US08_COMB.seq:*
Cgn2_6/ptodata/2/pna/US083_COMB.seq:*
Cgn2_6/ptodata/2/pna/US083_COMB.seq:*
Cgn2_6/ptodata/2/pna/US083_COMB.seq:*
Cgn2_6/ptodata/2/pna/US083_COMB.seq:*
Cgn2_6/ptodata/2/pna/US083_COMB.seq:*
Cgn2_6/ptodata/2/pna/US083_COMB.seq:*
Cgn2_6/ptodata/2/pna/US083_COMB.seq:*
Cgn2_6/ptodata/2/pna/US083_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US093_COMB.seq:*
Cgn2_6/ptodata/2/pna/US095_COMB.seq:*
Cgn2_6/ptodata/2/pna/US095_COMB.seq:*
Cgn2_6/ptodata/2/pna/US095_COMB.seq:*
Cgn2_6/ptodata/2/pna/US096_COMB.seq:*
Cgn2_6/ptodata/2/pna/US096_COMB.seq:*
Cgn2_6/ptodata/2/pna/US096_COMB.seq:*
Cgn2_6/ptodata/2/pna/US096_COMB.seq:*
Cgn2_6/ptodata/2/pna/US096_COMB.seq:*
Cgn2_6/ptodata/2/pna/US098_COMB.seq:*
Cgn2_6/ptodata/2/pna/US098_COMB.seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patents NA Main: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S COMB.seq:*
_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75154660
```

```
44. /cgn2_6/ptodata/2/pna/USIO0B_COMB_seq;
46. /cgn2_6/ptodata/2/pna/USIO1D_COMB_seq;
46. /cgn2_6/ptodata/2/pna/USIO1D_COMB_seq;
47. /cgn2_6/ptodata/2/pna/USIO1D_COMB_seq;
48. /cgn2_6/ptodata/2/pna/USIO1D_COMB_seq;
48. /cgn2_6/ptodata/2/pna/USIO1D_COMB_seq;
59. /cgn2_6/ptodata/2/pna/USIO1D_COMB_seq;
59. /cgn2_6/ptodata/2/pna/USIO1D_COMB_seq;
59. /cgn2_6/ptodata/2/pna/USIO1D_COMB_seq;
59. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
60. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
61. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
63. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
64. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
65. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
66. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
67. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
68. /cgn2_6/ptodata/2/pna/USIO01_COMB_seq;
69. /cgn2_6/ptodata/2/pna
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

```
Sequence 38, Appl Sequence 1456, Ap Sequence 1456, Ap Sequence 482, App Sequence 55121, A Sequence 5511, A Sequence 56917, A Sequence 116415, Sequence 116415, Sequence 116416, Sequence 1297, Ap Sequence 1297, Ap Sequence 116411, Ap Sequence 116411, Ap Sequence 116411, Sequence 56631, Ap Sequence 116411, Sequence 2754, Ap Sequence 116411, Sequence 116411, Sequence 116411, Sequence 116411, Sequence 116411, Sequence 2754, Ap Sequence 11431, Ap Sequence 14561, A Sequence 5106, A Sequence 5106, A Sequence 5106, A Sequence 5106, A Sequence 5126, Ap Sequence 14561, Ap Sequence 34256, A Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: DN. )
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Full length
; OTHER INFORMATION: synthetic GF-14R gene
                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RECOMBINANT PROTEINS
                                               RESULT 1
US-09-107-166-38
Sequence 38, Application US/09507166
GENERAL INFORMATION:
APPLICANT: SHARVELY, MARSHALL D.
TITLE OF INVENTION: ENHANCED SOLUBILITY OF REC
CURRENT APPLICATION NUMBER: US/09/507,166
CURRENT FILING DATE: 2000-02-18
NUMBER OF SEQ ID NOS: 59
SOFTWARE: PATENTIN OF: 2.1
SEQ ID NO 38
ILENGTH: 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                    DB
                 Length
                                                 74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
7488
74888
74888
74888
74888
74888
74888
74888
74888
74888
74888
7
                                                 Result
No.
```

```
120
                                                                                                                        180
                                                                                                                                            180
                                                                                                                                                                 240
                                                                                                                                                                                      240
                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                 GGTCAGGAACCTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGAC 480
                                                                                                                                                                                                                                                                                                                                                                          ATCGCTAACGCTGAACTGGCTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTTC 540
                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                             AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGCCTTCCGGCAGAGAAGAACTGGTTTACATGCCTAGACTGGCTGAACAGGCTGAACGT
                                                    ATGGCTTCCGGCAGAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                                                                                                                                                                                                                                                          AAAGITITICITACCIGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                    TCCGTTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                541 TCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCCEGATCATGCAGCTGCTGCGAGACCTGACCTGTGGACCTCCGGACATGCAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACGCTGCTGACGAAATCAAAGAAGCTGCTGCTCCGAAACCGAACAAGAACAGCAGGCT
                    Gaps
                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 2
US-09-413-198-1041
US-09-413-198-1041
Sequence 1041, Application US/09413198
SENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai
APPLICANT: CHEN, Xianfeng
APPLICANT: SUBRAMANIAN, Gopalakrishnan
APPLICANT: ZHENG, Liansheng
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS 10-25
FILE REPERENCE: 2750-5655
CURRENT APPLICATION NUMBER: US/09/413,198
Length
                    Indels
Query Match 100.0%; Score 786; DB 21;
Best Local Similarity 100.0%; Pred. No. 5.6e-211;
Matches 786; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTAA 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCTAA 786
                                         н
                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                        엄
                                                                           \delta
                                                                                                 a
                                                                                                                       8
                                                                                                                                        g
                                                                                                                                                                 8
                                                                                                                                                                                  셤
                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                   음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
```

```
RESULT 3
US-10-361-942-1456
; Sequence 1456, Application
; GENERAL INFORMATION:
; APPLICANT: Lutfiyya, Linda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 1999-10-05
NUMBER OF SEQ ID NOS: 2540
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1041
LENGTH: 780
TYPE: DNA
ORGANISM: Arabidopsis thaliana
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: US-09-413-198-1041
                                                                                                               Ş
                                                                                                                                         유정
                                                                                                                                                                                         よ
                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                  661
                                                                                                                                                                                                    601
                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; 609
                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       μ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCTTCCGGCAGAGAAGACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                                                                                                                                                                                     GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                      TCCGTTTTCTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACGGAATCCTTAAGTTGCTTGACTCTAGACTCATCCCTGCCGCTGCTTCTGGTGATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTGCCTGCTTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCGTAGAAGAGCGAAATCTTCTCTCCGTCGCTTATAAGAATGTGATTGGTGCTCGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCGTTGAAGAACGTAACCTGCTGCTCGTTGCTTACAAAAAACGTTATCGGTGCTCGTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACGAAGAGATGGTAGAGTTTATGGAGAAAGTCTCCGCCGCCGTTGATGGCGATGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCGTCTGGGGCGTGAAGAGTTCGTATACATGGCTAAGCTCGCGGAGCAAGCGGAGAGG
                                                                                                               ACCCTGATCATGCAGCTGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGAC
                                                                                                                                                                                                                                                        TOTGTGTTCTATTACGAGATCCTCAATTCTCCTGATCGTGCCTGTAACCTCGCCAAACAG
                                                                                                                                                                                                                                                                                                           ATTGCTAATGCAGAGCTTGCTCCAACACACCCAATTCGTCTTGGTCTTGCATTGAACTTC
                                                                                                                                                                                                                                                                                                                               ATCGCTAACGCTGAACTGGCTCCGACCCACCGGTCTGGGTCTGGCTCTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                GGTCAAGAGAGGGAAAGACGCCGCCGAACATACACTCGCCGCTTACAAATCTGCTCAGGAT
                                                                                                                                                                                                                                                                                                                                                                                       CACGTCACGGCGATCCGTGAATATAGGTCTAAGATCGAGACGGAACTCTCCGGAATCTGC
                                                                                                                                                                                                    GCCTTTGATGAGGCGATTGCAGAGTTGGACACTCTTGGTGAAGAGTCATACAAAGACAGT
                                                                                               ACCTTGATCATGCAGCTTCTTCGTGACAATCTCACTCTCTGGACATCTGATATGCAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĠĠĊĠŦŔŦĊŔŦŦŦĊŖŦĊĠŔŦĊĠŔĠĊŔĠŔŔĠĠŔŔĠŔĠŖĠĊĊĠŦĠĠŦŔŔĊĠŔŦĠŔĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            any n or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64.7%;
78.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xaa =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 508.2; DB 20; Pred. No. 1.9e-132; 0; Mismatches 168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                 777
                                                                                                                          777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                  720
                                                                                                                                                                           720
                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                        600
```

US/10361942

```
TITLE OF INVENTION: Nucleic Acid Molecules And Ot)
TITLE OF INVENTION: Transcription In Plants
FILE REFERENCE: 38-21(1330)K
CURRENT APPLICATION NUMBER: US/10/361,942
CURRENT FILING DATE: 2003-02-10
PRIOR APPLICATION NUMBER: US 60/356,051
PRIOR APPLICATION NUMBER: US 60/356,051
PRIOR FILING DATE: 2002-02-11
NUMBER OF SEQ ID NOS: 2906
SEQ ID NO 1456
LENGTH: 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: Clone ID: AT_F3F9.C1.o16. US-10-361-942-1456
                                   8
                                                                                                   밁
                                                                                                                                               Ś
                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
밁
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Arabidopsis thaliana
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
721
                                              721
                                                                                                   661
                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      609; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACGGAATCCTTAAGTTGCTTGACTCTAGACTCATCCCTGCCGCCTGCTTCTGGTGATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACGAAGAGATGGTAGAGTTTATGGAGAAAGTCTCCGCCGCCGTTGATGGCGATGAACTC
  ACCCTGATCATGCAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGAC 720
                                                                                                                                                                                                                                          GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGAÇTCC
                                                                                                                                                                                                                                                                                                                TCTGTGTTCTATTACGAGATCCTCAATTCTCCTGATCGTGCCTGTAACCTCGCCAAACAG
                                                                                                                                                                                                                                                                                                                                           TCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGCTAATGCAGAGCTTGCTCCAACACACCCAATTCGTCTTGGTCTTGCATTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGCTAACGCTGAACTGGCTCCGACCCACCCGATCCGGTCTGGGTCTGGACCTGGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĠĠŦĊĄĄĠĄĠĄĠĄĄĄĠĄĊĠĊĊĠĊĊĠĄĄĊĄŦĄĊĄĊŤĊĠĊĊĠĊŦŦĄĊĄĄĄŤĊŦĠĊŦĊĄĠĠĄŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      детсаверал сетара в в предоста става се по предоста се по предоста по пред
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGTTTTCTACCTGAAAAIGAAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACGTCACGGCGATCCGTGAATATAGGTCTAAGATCGAGACGGAACTCTCCGGAATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACGITACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCGTAGAAGAGCGAAATCTTCTCTCCGTCGCTTATAAGAATGTGATTGGTGCTCGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCGTCTGGGCGTGAAGAGTTCGTATACATGGCTAAGCTCGCGGAGCCAAGCGGAGAGG
                                                                                                                                                                                                       ĠĊĊŦŦŦĠĂŦĠĂĠĠĊĠĂŤŦĠĊĀĠĀĠŦŤĠĠĀĊĀĊŦĊŤŦĠĠŦĠĀĀĠĀĠŦĊĀŦĀĊĀĀĀĠĀĊĀGŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>AAGGTCTTTTACCTTAAGATGAAGGGAGATTATCACAGGTACTTGGCTGAGTTTAAGACT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64.7%;
78.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 508.2; DB 50;
Pred. No. 1.9e-132;
0; Mismatches 168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Other Molecules
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Associated
                                                          777
     777
                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    With
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
ACCCTGATCATGCAGCTGCTGACAACCTGACCTGTGGACCTCCGACATGCAGGAC 720
                                                                        RESULT 5
US-10-155-881-34295
                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 34295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTTTCGACGAAGCTATCGCTGAGCTCGACCACCTGGGTGAAGAATCCTACAAAGACTCC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            raceaagaareeracarrrareeagaaagrcrccccccrrcareecareaacrc 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACGICACGGCGAICCGIGAAIAIAGGICIAAGAICGAGACGGAACICICCGGAAICIGC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCAGGAACGTAAAAACGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGAC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCAAGAGAGGAGGGCGCCGAACATACACTCGCCGCTTACAAATCTGCTCAGGAT 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     deenindandadddanndcadadniddaddcirindcidaadadcanadadddan 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Accingarcarecaecincincereacaarcicacicreresacarcicaararecaesar 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACGGAATCCTTAAGTTGCTTGACTCTAGACTCATCCCTGCCGCTGCTTCTGGTGATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 Aridecercresecercias de actrostrata en contra en contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 ACCGITGAAGAACGIAACCIGCIGICCGITGCITACAAAACGITAICGGIGCICGICGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 ACCGTAGAAGAGAAATCTTCTCCGTCGCTTATAAGAATGTGATTGGTGCTCGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGGTGGTAACGACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGICTITTACCTTAAGATGAAGGGAGTTATCACAGGTACTTGGCTGAGTTTAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCGCTAACGCTGAACTGGCTCCGACCCGACCCGATCCGTCTGGGTCTGGGCTCTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arracraaracadacrracracaacacacracracracracracracracarracarradacrra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rendrientenariacidada recirca arrience redicerenta acerese canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCTTCCGGCAGAGGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACGITACCGCTATCCGTGAATACCGTTCCAAAATCGAAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                        APPLICANT: MONSANTO Technology LLC
APPLICANT: MONSANTO Technology LLC
APPLICANT: MONSANTON: Linda L
TITLE OF INVENTION: NUCLEIC ACIDS AND OTHER MOLECULES ASSOCIATED WITH
TITLE OF INVENTION: TRANSCRIPTION IN PLANTS
FILE REFERENCE: 38-21 (15300)1
CURRENT APPLICATION WITHBER: US/60/356,051
CURRENT FILING DATE: 2002-02-11
NUMBER OF SEQ ID NOS: 2926
SOFTWARE: Patentin version 3.1
SEQ ID NO 482
LENGTH: 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 92; Length 780;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 508.2; DB 92;
Pred. No. 1.9e-132;
0; Mismatches 168;
ESULT 4
Sequence 482, Application US/60356051
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-60-356-051-482
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 78.4%;
Matches 609; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

```
APPLICANT: Dotson, Stanton B.
APPLICANT: Movalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong
APPLICANT: Liu, Jingdong
APPLICANT: Lutisyra, Linda L.
APPLICANT: McIninch, James
TITLE OF INVENTION: WINCIEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH
TITLE OF INVENTION: TRANSCRIPTION IN PLANTS
FILE REFERENCE: 38-21(15300) J
CURRENT APPLICATION MUNBER: US/10/155,881
CURRENT PILLING DATE: 2002-05-22
NUMBER OF SEQ ID NOS: 37595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTTTGATGAGGCGATTGCAGAGTTGGACTCTTGGTGAAGAGTCATACAAAGACAGT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09
TACGAAGAAATGGTTGAATTCATGGAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    319 ACCGTAGAAGAGCGAAATCTTCTCTCTCGTCGCTTATAAGAATGTGATTGTGTCGTCGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCAGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        derchaehengahendeceeceecehachtachenceeceerthechahtereere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                679 ATTGCTAATGCAGAGCTTGCTCCAACACACCCCAATTCGTCTTGGTCTTGCATTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199 ATGGCGTCTGGGCGTGAAGAGTTCGTATACATGGCTAAGCTCGCGGAGCAAGCGGAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCTCGTGGCGTATCATTCATCGATCGAGGAAGGAAGAGGAGGCGGTGGTAACGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACGITACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              caccicacedcogarccordaararagercraagarceagacegaacreccegaarcrec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gacegaarcerraagriedringacreragacrearecereceserecrierresagried
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               739 rengigirerariacoacarecteaarrerectoarectororocoeraaceteacaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATGCCTTCCGGCAGAGAACTGGTTTACATGGCTAGACTGGACGAGGCTGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u> ACCGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGGTCTTTTACCTTAAGATGAAGGGAGATTATCACAGGTACTTGGCTGAGTTTAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGCTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1270;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 64.7%; Score 508.2; DB 46;
Best Local Similarity 78.4%; Pred. No. 2.2e-132;
Matches 609; Conservative 0; Mismatches 168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA; ORGANISM: Arabidopsis thaliana columbia US-10-155-881-34295
                                                                                                                                           ; Sequence 34295, Application US/10155881; GENERAL INFORMATION:
```

뭐 5 밁

```
Sequence 55791, Application US/09513996A

GENERAL INFORMATION:
APPLICANT: N. ALEXANDROV et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND TITLE OF INVENTION: ENCODED THEREBY
FILE REFERENCE: 2750-7099;
CURRENT APPLICATION NUMBER: US/09/513,996A
CURRENT APPLICATION NUMBER: US/09/513,996A
CURRENT FILING DATE: 2000-02-25
NUMBER OF SEQ ID NOS: 81028
SEQ ID NO 55791
LENGTH: 1283
TYPE: DNA
ORGANISM: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
US-09-513-996A-55791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Location 1..1283 / Ceres Seq. ID 2114087
US-09-513-996A-55791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: UNSURE
LOCATION: 1..1283
OTHER INFORMATION: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                    541
                                                        693
                                                                                        481
                                                                                                                         633
                                                                                                                                                           421
                                                                                                                                                                                               573
                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                  513
                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                        453
                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                             393
                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 609;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
TCCGTTTTCTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                              ATCGCTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTC
                                                                                                                                                       GGTCAGGAACGTAAAGACGCTGCTGAACACCCCTGGCTGCTTACAAATCCGCTCAGGAC
                                                                                                                                                                                                                                                                                                  GACGGTATCCTGAAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCTGCTGACTCC
                                                                                                                                                                                                                                                                                                                                          CACGTCACGGCGATCCGTGAATATAGGTCTAAGATCGAGACGGAACTCTCCGGAATCTGC
                                                                                                                                                                                                                                                                                                                                                                        CACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACGAAGAGATGGTAGAGTTTATGGAGAAAGTCTCCGCCGCCGTTGATGGCGATGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCAAGAGAGGAAAGACGCCGCCGAACATACACTCGCCGCTTACAAATCTGCTCAGGAT
                                                                                                                                                                                               AAGGTCTTTTACCTTAAGATGAAGGGAGATTATCACAGGTACTTGGCTGAGTTTAAGACT
                                                                                                                                                                                                                               AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC
                                                                                                                                                                                                                                                                    GACGGAATCCTTAAGTTGCTTGACTCTAGACTCATCCCTGCCGCCTGCTTCTGGTGATTCC
                                                                                                                                                                                                                                                                                                                                                                                                             ACCGTAGAAGAGCGAAATCTTCTCTCCGTCGCTTATAAGAATGTGATTGGTGCTCGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCGTCTGGGCGTGAAGAGTTCGTATACATGGCTAAGCTCGCGGAGCAAGCGGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTTGATCATGCAGCTTCTTCGTGACAATCTCACTCTCTGGACATCTGATATGCAGGAT 918
                                                        ATTGCTAATGCAGAGCTTGCTCCAACACACCCAATTCGTCTTGGTCTTGCATTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     any n or Xaa =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64.7%;
78.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 508.2; DB 21;
Pred. No. 2.2e-132;
0; Mismatches 168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1283;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AND CORRESPONDING POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                           692
                                                                                                                                                                                                                               420
                      600
                                                                                        540
                                                                                                                                                             480
                                                                                                                                                                                                                                                                  572
                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                        512
                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                             452
                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                        752
                                                                                                                                                                                               632
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                          뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; NAME/KEY: misc_feature
; LOCATION: (1)..(1283)
; OTHER INFORMATION: 25284 :
US-09-565-309A-56917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-565-309A-56917; Sequence 56917, Application; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                   밁
                                                                   Ś
                                                                                                         문
                                                                                                                                       5
                                                                                                                                                                            밁
                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                       $
                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: ALEXANDROV, Nickolai
APPLICANT: BROVER, Vyacheslav
APPLICANT: BROVER, Vyacheslav
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: THEREBY
FILE REFERENCE: 2750-0853P
CURRENT FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 68449
SEQ ID NO 56917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 1283

TYPE: DNA
ORGANISW: Arabidopsis thaliana
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1). (1283)
OTHER INFORMATION: any n = a, 9,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 609; Conservative
                                         573
                                                                                                          513
                                                                                                                                            301
                                                                                                                                                                                                                                                   393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
   421
                                                                                                                                                                              453
                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                       333
                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                            273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  213 ATGGCGTCTGGGCGTGAAGAGTTCGTATACATGGCTAAGCTCGCGGAGCAAGCGGAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        753
                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                       TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC 660
   GGTCAGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGAC
                                                                 AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAAACC
                                                                                                          GACGGAATCCTTAAGTTGCTTGACTCTAGACTCATCCCTGCCGCTGCTTCTGGTGATTCC
                                                                                                                                   GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCCGGTGACTCC
                                                                                                                                                                              CACGTCACGGCGATCCGTGAATATAGGTCTAAGATCGAGACGGAACTCTCCGGAATCTGC
                                                                                                                                                                                                                CACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                   GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                                                                                                                                                                       ACCGTAGAAGAGCGAAATCTTCTCTCCGTCGCTTATAAGAATGTGATTGGTGCTCGCCGT
                                                                                                                                                                                                                                                                                                                                                         ACCGTTCAAGAACCTAACCTGCTCCGTTCCTTACAAAAACGTTATCGGTGCTCGTCGT
                                                                                                                                                                                                                                                                                                                                                                                              TACGAAGAGATGGTAGAGTTTATGGAGAAAGTCTCCGCCGCCGTTGATGGCGATGAACTC 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>ATGGCTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCTTGATCATGCAGCTTCTTCGTGACAATCTCACTCTCGGACATCTGATATGCAGGAT 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCCTGATCATGCAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGAC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTTTGATGAGGCGATTGCAGAGTTGGACACTCTTGGTGAAGAGTCATACAAAGACAGT 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGTGTTCTATTACGAGATCCTCAATTCTCCTGATCGTGCCTGTAACCTCGCCAAACAG
                                                                                                                                                                                                                                                   CGTGGCGTATCATTCATCGATCGAGCAGAAGGAAGAGAGCCGTGGTAACGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64.7%;
78.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/09565309A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OVERLAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 508.2; DB 24;
Pred. No. 2.2e-132;
0; Mismatches 168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Clone Number :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unknown,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OVERLAP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             989
                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    272
                                                                         420
     480
                                                                                                                                                                                512
                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                         632
                                                                                                          572
                                                                                                                                            360
                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                   452
                                                                                                                                                                                                                                                                                                                         392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

δ 밁 Ş

맑 δ 片 Š В Ş 밁

S 밁 Ş g Ś 뮍 Ş 뮍 δ

~

Mon Jun

```
420
                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                 693
                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                              753
                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                         813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               874 ACCTIGATCATGCAGCTICTTCGTGACAATCTCACTCTCTGGACATCTGATATGCAGGAT 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721 GACGCTGCTGACGAAATCAAAGAAGCTGCTCCGAAACCGAACCGAAGAACAGCAG 777
                                                                                                                                                                                                                                               634 GGTCAAGAGAGGAAAGACGCCGCCGAACATACACTCGCCGCCTTACAAATCTGCTCAGGAT
                                                                                                                                                                                                                                                                                                                               ATTGCTAATGCAGAGCTTGCTCCAACACACCCAATTCGTCTTGGTCTTGCATTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                         TOCGITITICIACIACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                          754 TCTGTGTTCTATTACGAGATCCTCAATTCTCCTGATCGTGCCTGTAACACGCCAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 814 GCCTTTGATGAGGCGATTGCAGAGTTGGACACTCTTGGTGAAGAGTCATACAAAGACAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCTGATCATGCAGCTGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGAC
                                             AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC
                                                                                                                                                  574 AAGGICTITIACCTIAAGAIGAAGGGAGATIAICACAGGIACTIGGCIGAGITIAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 210 cercháccakácsákákarregrarkekráckákacíredeckákáckákácsákackárraká
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65 AAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGACTGACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           270 AagaAarGGrrGAArrCArGGAGAAAGrCGCGGAAGCCGrrGACAAAAAGACGAACTCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIGAAGAACGTAACCIGCTGTCCGTIGCTTACAAAAACGTTATCGGTGCTCGTCGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACGACCACG
               GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCC
                                                                                                                                                                                                    GGTCAGGAACGTAAAGACGCTGAACACCCTGGCTGCTTACAAATCCGCTCAGGAC
                                                                                                                                                                                                                                                                                               ATCGCTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTACCECTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTACGTCGATCCGTGACTACAGAAGCAAGATCGAAAACGGAACTTTCTGAAAATCTGTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 27; Length 1287;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 497.8; DB 27;
Pred. No. 1.9e-129;
0; Mismatches 172;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 116415, Application US/09654617
GENERAL INFORMATION: APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong Annotated Plant Ge; TITLE OF INVENTION: 38-21(15097)D
FILE REPRENCE: 38-21(15097)D
CURRENT APPLICATION NUMBER: US/09/654,617
CURRENT FILING DATE: 2000-09-05
NUMBER OF SEQ ID NOS: 463173
SEQ ID NO 116415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-654-617-11641S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 77.7%;
Matches 601; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9
US-09-654-617-116415
                                                                                                       361
                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                              694
                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      245
               301
                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                450
                                                                                                    ò
                                                                                                                                          유
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                               심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    상염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8

US-09-565-300A-49515

Sequence 49515, Application US/09565309A

Sequence 49515, Application US/09565309A

GENERAL INFORMATION:
APPLICANT: BENOWE, Vyacheslav

TITLE OF INVENTION: THERENY
TITLE OF INVENTION: THERENY
FILE REFERENCE: 2750-0853P

CURRENT APPLICATION NUMBER: US/09/565,309A

CURRENT PILING DATE: 2000-05-05

NUMBER OF SEQ ID NOS: 68449

SEQ ID NO 49515

LENGTH: 1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
540
                                                                                                                           752
                                                                                                                                                                           600
                                                                                                                                                                                                                      812
                                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                            ACCCTGATCATGCAGCTGCTGCGTGACAACCTGAGGACCTCCGAACATGCAGGAC 720
                                                                                                                                                                                                                                                                                                                                                                                            873 ACCTIGATCATGCAGCTTCTTCGTGACAATCTCACTCTCTGGACATCTGATATGCAGGAT 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                274 TACGAAGAGATGGTAGAGTTTATGGAGAAAGTCTCCGCCCCCTTGATGGCGATGAACTC 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACGITACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA

PGRANISM: Arabidopsis thaliana

PEATURE:
NAME/KEY: misc_feature

COTHER INFORMATION: any n = a, g, c, t, unknown, or other

NAME/KEY: misc_feature

COTHER INFORMATION: 25284 : 5TAG CONSENSUS (Clone Number: 5tag_consensus)

US-09-565-309A-49515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCGTAGAAGAGGGAAATCTTCTCTCCGTCGCTTATAAGAATGTGATTGGTGCTCGCCGT
                                                                                                                                                                   TCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                 rcrererrerational de la contra dela contra de la contra de la contra de la contra de la contra dela contra de la contra del la contra del la contra del la contra de la contra de la contra del la contra de la contra del la contra de la contra de la contra de la contra de la contra del la contr
                                                                                                                                                                                                                                                                GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ATGGCTTCCGGCAGAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       214 ATGGCGTCTGGGCGTGAAGAGTTCGTATACATGGCTAAGCTCGCGGAGCAAGCGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCOTTGAAGAACGTAACCTGCTGCTTACCAAAAACGTTATCGGTGCTCGTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACGTCACGGCGATCCGTGAATATAGGTCTAAGATCGAGACGGAACTCTCCGGAATCTGC
                                                                           ATCGCTAACGCTGGCTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTTC
                                                                                                              ATTGCTAATGCAGAGCTTGCTCCAACACCAATTCGTCTTGGTCTTGCATTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 64.7%; Score 508.2; DB 24; Length 1285; Best Local Similarity 78.4%; Pred. No. 2.2e-132; Matches 609; Conservative 0; Mismatches 168; Indels 0;
                                                                                                                   693
                                                                                                                                                                                                                 753
                                                                                                                                                                                                                                                                                                              813
                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          394
                                                                                                                                                                      541
                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                           633
                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     454
                         g
                                                                                                            g
                                                                                                                                                                                                    8 B
                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
8
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                    ò
                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
```

```
**ILE REFERENCE: 38-21(15097)D
CURRENT APPLICATION NUMBER: US/09/684,016
CURRENT FILING DATE: 2000-10-10
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR FILING DATE: 2000-09-05
NUMBER OF SEQ ID NOS: 463173
SEQ ID NO 116415
LENGTH: 1287
TYPE: DNA
ORGANTON:
                                                                                                                      8
                     δ
                                                  망
                                                                     Ś
                                                                                             뮍
                                                                                                                                                   밁
                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
US-09-684-016-116415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                      ; ORGANISM: Arabidopsis thaliana US-09-684-016-116415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 116415, Application US/09684016 GENERAL INFORMATION:
                                                                                                                                                                                                     Matches
   390
                                                                                                     270
                                                                                                                                                     210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      305
                                                                                                                                                                                                      601;
                                                                                                                                                                             v
                                                                                                                                                                                                                 Similarity
 CGTGGAGAATCATTCATCGATCGAACAAAAGGAAGAGAGTCGTGGTAACGATGACCACG
                 CCTGGCGTATCATCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGACCACG
                                                  TCGAAGAACGTAATCTCCTCCCTCCCTTACAAAAACGTCATCGGAGCTCGTCGTGCTT
                                                                  TIGAAGAACGIAACCIGCIGTCCGTIGCTIACAAAAACGITATCGGTGGTCGTCGTCGTCTIT
                                                                                                 AAGAAATGGTTGAATTCATGGAGAAAGTCGCGGAAGCCGTTGACAAAGACGAACTCACCG
                                                                                                                   AAGAAATEGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCG
                                                                                                                                                  CCTCAGCGAGGGAAGAGTTCGTATACATGGCGAAGCTCGCCGAGCAAGCGGAGCGTTACG
                                                                                                                                                                         TTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGGTCTGAACTTCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTTTTACCTTAAGATGAAGGGAGATTATCATAGGTACTTGGCTGAGTTTAAGACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGATCATGCAGCTTCTTCGTGACAATCTCACTCTCTGGACATCTGATATGCAGGATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGATCATGCAGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGATGAAGCGATTGCTGAGTTGGATACTCTTGGTGAAGAGTCATACAAGGACAGTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTTTTACTATGAGATTCTCAATTCTCCAGATCGTGCTTGTAATCTCGCTAAGCAGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAATGCTGAATTGGCTCCAACGCATCCGATTCGTCTTGGTCTTGCGTTGAACTTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGAGAĞGAAAGATĞÖTĞAACATACTCTCACCĞCTTACAAAGCTĞCTCAĞGATATTĞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAT CETTAAGETTETTGATACTAGAETCGTTCCTGCTGCTGCTTCTGGAGATTCGAAGG
                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  Kovalic, David K.
                                                                                                                                                                                                  63.3%; Score 497.8; DB 29; 77.7%; Pred. No. 1.9e-129; tive 0; Mismatches 172;
                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                           Length 1287;
                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        982
                                                                                                                                                                                                 Gaps
                         244
                                                                       184
                                                                                                                         124
 449
                                                                                                                                                  269
                                                                                                                                                                          64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    424
                                                 389
                                                                                                 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     364
밁
                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
US-09-733-089-1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                 US-09-733-089-1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                          Sequence 1308, Application US/09733089
GENERAL INFORMATION:
APPLICANT: Dotson, Stanton B.
                                               Matches
                                                                      Query Match
                                                                                                      TYPE: DNA
ORGANISM: Arabidopsis thaliana
                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                245
CCTCAGCGAGGGAAGAGTTCGTATACATGGCGAAGCTCGCCGAGCAAGCGGAGCGTTACG
                                               Conservative
                                             63.3%; Score 497.8; DB 31; 77.7%; Pred. No. 1.9e-129; tive 0; Mismatches 172;
```

```
APPLICANT: Dotson, Stanton B.
APPLICANT: Kovalic, David K.
APPLICANT: Liu, Jingdong
APPLICANT: Lutfiyya, Linda L.
APPLICANT: McIninch, James
APPLICANT: WCININCH, James
APPLICANT: WL. Wei
TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
TITLE OF INVENTION: Transcription In Plants
FILE REFERENCE: 38-21(15300) D
CURRENT APPLICATION NUMBER: US/09/733,089
CURRENT APPLICATION NUMBER: US 09/474,435
PRIOR APPLICATION NUMBER: US 09/474,435
PRIOR FILING DATE: 1999-12-28
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR FILING DATE: 2000-09-05
PRIOR PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  450 TTACGTCGATCCGTGACTACAGAAGCAAGATCGAAACGGAACTTTCTGAAATCTGTGACG
CTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     СТОСТОАСОВАЛАТСАЛА САЛАССТОСТОСТОСКАЛА ССОВАСОВАЛОЛАСТВО 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rearcarecaecrecrecereacaaccreaccrereeacrereceacarecaecaecaceace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCGACGAAGCTATCGCTGAGCTCGACCCCTGGGTGAAGAATCCTACAAAGACTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTTTTACTATGAGATTCTCAATTCTCCAGATCGTGCTTGTAATCTCGCTAAGCAGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAATGCTGAATTGGCTCCAACGCATCCGATTCGTCTTGGTCTTGCGTTGAACTTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATCCTTAAGCTTCTTGATACTAGACTCGTTCCTGCTGCTGCTTCTGGAGATTCGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTATCCTGAAACTGCTGGACTCCCGTCTGATCCCCGGCTGCTTCCGGTGACTCCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGATCATGCAGCTTCTTCGTGACAATCTCACTCTCTGGACATCTGATATGCAGGATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGATGAAGCGATTGCTGAGTTGGATACTCTTGGTGAAGAGTCATACAAGGACAGTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGAGAAAAGATGCTGCTGAACATACTCTCACCGCTTACAAAGCTGCTCAGGATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTTTACCTTAAGATGAAGGGAGATTATCATAGGTACTTGGCTGAGTTTAAGACTGGTC
                                                                                                    Indels
                                                                                                                                                                                              Length 1287
                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                982
     64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    749
```

ω

ö q à ద 8 8 8

g &

엄 ò 셤 g

 $\overset{\sim}{\circ}$

g ò a

ઠે

a

ò g δ D D

ò

```
Sequence 445, Application US/09620394B
GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai
APPLICANT: BROVER, Vyacheslav
ITPLICANT: PROVER, Vyacheslav
ITILE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
ITILE OF INVENTION: Thereby.
                                                                                                                                                       ô
                                                                                                                                                                                                               269
                                                                                                                                                                                                                                           124
                                                                                                                                                                                                                                                                        329
                                                                                                                                                                                                                                                                                                      184
                                                                                                                                                                                                                                                                                                                                  389
                                                                                                                                                                                                                                                                                                                                                               244
                                                                                                                                                                                                                                                                                                                                                                                           449
                                                                                                                                                                                                                                                                                                                                                                                                                         304
                                                                                                                                                                                                                                                                                                                                                                                                                                                      509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGAACGTAAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCG 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCC 664
                                                                                                                                                                                    64
                                                                                                                                                                                                                                                           270 AAGAAATGGTTGAATTCATGGAGAAAGTCGCGGAAGCCGTTGACAAAGACGAACTCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        870 rearcarecarcircareacaarcicacreacarcicatrareaarareaagarea
                                                                                                                                                                                                             210 cercadedadadagarregraracardededaderededadedadedadederrade
                                                                                                                                                                                                                                          AAGAAATGGTTGAATTCATGGAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCG
                                                                                                                                                                                                                                                                                                                                 rcdaagaaceraarcrccrcrccercecrracaaaacercarceaecrcercere
                                                                                                                                                                                                                                                                                                                                                             CCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACG
                                                                                                                                                                                                                                                                                                                                                                                     TTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTACGTCGATCCGTGACTACAGAAGCAAGATCGAAACGGAACTTTCTGAAATCTGTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATCCTTAAGCTTCTTGATACTAGACTCGTTCTGCTGCTTCTGGAGATTCGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGAGAGAAGATGCTGCTGAACATACTCTCACCGCTTACAAAGCTGCTCAGGATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAATGCTGAATTGCCTCCAACGCATCCGATTCGTCTTGGTCTTGCGTTGAACTTCTCTG
                                                                                                                                                                                 5 CTTCCGGCAGAGGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACG
                                                                                                                                                                                                                                                                                                      TIGAAGAACGIAACCIGCIGTCCGTIGCTIACAAAAACGIIAICGGIGCICGICGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCCGGTGACTCCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTTTACCTTAAGATGAAGAGAGATTATCATAGGTACTTGGCTGAGTTTAAGACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGATCATGCAGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGACGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITICIACTACGAAATCCTGAACTCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rrdardaadcgarrdcrcaarracrcrrcgraadaagrcaracaagagacacra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTAACGCTGAACTGGCTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1287;
                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 33;
                                                                                                                        Score 497.8; DB 33;
Pred. No. 1.9e-129;
0; Mismatches 172;
                                                            TYPE: DNA ORGANISM: Arabidopsis thaliana
                                                                                                                      Query Match
Best Local Similarity 77.7%;
Matches 601; Conservative
 PRIOR FILING DATE: 2000-07-19
NUMBER OF SEQ ID NOS: 24143
SEQ ID NO 1308
LENGTH: 1287
                                                                                           US-09-816-660-1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
US-09-620-394B-445
                                                                                                                                                                                                                                                                                                    125
                                                                                                                                                                                                                                                                                                                                  330
                                                                                                                                                                                                                                                                                                                                                                                           390
                                                                                                                                                                                                                                                                                                                                                                                                                                                    450
                                                                                                                                                                                                                                           65
                                                                                                                                                                                                                                                                                                                                                               185
                                                                                                                                                                                                                                                                                                                                                                                                                         245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        725
                                                                                                                                                                                                        g
                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       329
                                                            184
                                                                                        389
                                                                                                                      244
                                                                                                                                                   449
                                                                                                                                                                                                            509
                                                                                                                                                                                                                                          364
                                                                                                                                                                                                                                                                      569
                                                                                                                                                                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                               629
                                                                                                                                                                                                                                                                                                                                                                                          689
                                                                                                                                                                                                                                                                                                                                                                                                                                                    749
   124
                                                                                                                                                                               304
                                                                                                                                                                                                                                                                                                                                                             484
                                                                                                                                                                                                                                                                                                                                                                                                                        544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 929
                                                                                                                                      CGTGGAGAATCATTTCATCGATCGAACAAAGGAAGAGAGGTCGTGGTAACGATGACCACG
                       AAGAAATGGTTGAATTCATGGAGAAAGTCGCGGAAGCCGTTGACAAAGACGAACTCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCG
                                                        TTGAAGAACGTAACCTGCTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTT
                                                                                   rcaaadaacgraarcrccrcccrcccrcaaaaacgrcarcgagcrcgrccrr
                                                                                                                   CCTGGCGTATCATCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACG
                                                                                                                                                                          TTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACG
                                                                                                                                                                                                        TTACGTCGATCCGTGACTACAGAAGCAAGATCGAAACGGAACTTTCTGAAATCTGTGACG
                                                                                                                                                                                                                                     GTAICCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCCGGTGACTCCAAAG
                                                                                                                                                                                                                                                                daariccirraadcircirdaracradacircerrecrideriderideridadaarredaada
                                                                                                                                                                                                                                                                                                TITICIACCIGAAAAIGAAAAGGIGACIACCACCGGIACCIGGCIGAGIIITAAAACCGGIC
                                                                                                                                                                                                                                                                                                                      570 TGTTTTACCTTAAGATGAAGGAGATTATCATAGGTACTTGGCTGAGTTTAAGACTGGTC
                                                                                                                                                                                                                                                                                                                                                       AGGAACGTAAAGACGCTGCTGAACACCCTGGCTGCTTACAAATCCGCTCAGGACATCG
                                                                                                                                                                                                                                                                                                                                                                                     AAGAGAGGAAGATGCTGCTGAACATACTCTCACCGCTTACAAAGCTGCTCAGGATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTTCTACTACGAAATCCTGAACTCCCGGACCGTGCTTGCAACCTGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         retitractardagarretearreteagaregreerreraareregrageage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGACGAAGCTATCGCTGAGCTCGACACCTGGGTGAAGAATCCTACAAAGACTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGATCATGCAGCTTCTTCGTGACAATCTCACTCTGGACATCTGAATATGCAGGATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                   CTAACGCTGAACTCCGACCCACCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGATGAAGCGATTGCTGGATACTCTTGGTGAAGAGTCATACAAGGACAGTACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGATCATGCAGCTGCTGCTGACAACCTGACCTGTGGACCTCCGACATGCAGGACGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCGGATGAGATCAAGGAAGCAGCACAAAACCGACCGAGGAACAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 1308, Application US/09816660; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
US-09-816-660-1308
65
                          270
                                                        125
                                                                                   330
                                                                                                                                              390
                                                                                                                                                                            245
                                                                                                                                                                                                                                                                510
                                                                                                                                                                                                                                                                                                                                                                                                                                              069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              870
                                                                                                                 185
                                                                                                                                                                                                        450
                                                                                                                                                                                                                                     305
                                                                                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                                                                                                         425
                                                                                                                                                                                                                                                                                                                                                                                       630
                                                                                                                                                                                                                                                                                                                                                                                                                   485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   665
```

```
FEATURE:

NAME/KEY: misc feature

LOCATION: 1.1154

OTHER INFORMATION: any n = a.

NAME/KEY: misc feature

LOCATION: 1.1154

OTHER INFORMATION: Ceres Seq

US-09-620-394B-445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 2750-1067P
CURRENT APPLICATION NUMBER: US/09/620,394B
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 9131
SEQ ID NO 445
LENGTH: 1154
TYPE: DNA
ORGANISM: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 596; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        346
                                                                                                                                                                      706
                                                                                                                                                                                                                                                 646
                                                                                                                                                                                                                                                                                                                             586
                                                                                                                                                                                                                                                                                                                                                                485
                                                                                                                                                                                                                                                                                                                                                                                                                                            425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         106 CCTCGGCGAGGGAAGAGTTCGTGTACCTCGCAAAGCTCGCAGAGCAAGCGGAACGTTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            v
                                           CTGCTGACGAAATCAAAGAAGCTGCTGCTCCGAAACCGACGAAGAACAGCAGGCTAGCT
                                                                                                                                                                                                                                                                     TTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTT
                                                                                                                                                                                                                                                                                                                         CTAATGCTGAATTGGCTCCAACGCATCCGATTCGTCTTGGTTTTGGAATTTCTCTG
                                                                                                                                                                                                                                                                                                                                                    CTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGGCTCTGAACTTCTCCG
                                                                                                                                                                                                                                                                                                                                                                                                     AAGAGAGGAAAGATGCTGCAACATACTCTCACCGCTTACAAAGCTGCTCAGGATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGAACGTAAAGACGCTGCAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTATTCTTAAGCTTCTTGATACTAGACTTGTTCCTGCTTCTGCTAATGGAGATTCTAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGACCACGATCCGTGATTACAGAAGCAAGATCGAATCTGAGTTATCGAAAATCTGTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTGGAGAATCATCTCCATTGAACAAAAAGAAGAGAGAGTCGTGGTAACGATGACCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         сствесстатсятстсстссатсвалсявальноваетссстветвалсвасвассасс
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGAAGAACGTAATCTCCTCTCCGTCGCTTACAAAAACGTAATCGGTGCTCGTCGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGAAATGGTTGAATTCATGGAAAAAGTCGCTGAAGCCGTTGACAAAGACGAACTCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGCTGACGGTGACGAACTGACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACG
                GTCCGGAGGAGATTAAAGAAGCAGCAGCACCAAAGCCTGCTGAAGAACAGAAGAAGAGATCT
                                                                                          TGATCATGCAGCTTCTTCGTGACAATCTTACTCTCGGACTTCTGACATGCAGGACGAAA
                                                                                                                         TGATCATGCAGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACG
                                                                                                                                                                      TTGATGAAGCCATTGCTGAGTTAGATACTCTTGGAGAGGAGTCATACAAGGATAGTACCT
                                                                                                                                                                                                       rcgacgaagcrarcgcrgagcrcgacacccrgggrgaagaarccracaagacrccaccc
                                                                                                                                                                                                                                               TGTTTTACTATGAGATTCTTAATTCTCCAGATCGTGCTTGTAATCTCGCTAAGCAGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   76.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seq.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 484.4; DB 26;
Pred. No. 1.1e-125;
0; Mismatches 186;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ā
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1376532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unknown,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                          825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       165
                                                                                                                                                                                                                                                                                      604
                                                                                                                                                                                                                                                                                                                           645
                                                                                                                                                                                                                                                                                                                                                                                                       585
                                                                                                                                                                                                                                                                                                                                                                                                                                            484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64
                888
                                                     784
                                                                                                                               724
                                                                                                                                                                      765
                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                 705
                                                                                                                                                                                                                                                                                                                                                                544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            225
                        8
                                                                      맑
                                                                                                       Ś
                                                                                                                                                밁
                                                                                                                                                                               Ś
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA; ORGANISM: Arabidopsis US-10-155-881-34293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
US-10-155-881-34293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Dotson, Stanton B.
APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Liutfiyya, Linda L.
APPLICANT: Lutfiyya, Linda L.
APPLICANT: MCININCH, UJames
TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH
TITLE OF INVENTION: TRANSCRIPTION IN PLANTS
FILE REFERENCE: 38-01(15500) U
CURRENT APPLICATION UNDER: US/10/155,881
CURRENT PILING DATE: 2002-05-22
NUMBER OF SEQ ID NOS: 37595
SEQ ID NO 34293
LENGTH: 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Simi:
Matches 594; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 34293, Application US/10155881 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                    344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       164
                                                                                                             545
                                                                                                                                                  524
                                                                                                                                                                                       485
                                                                                                                                                                                                                              464
                                                                                                                                                                                                                                                                                                                                           365
                                                                                                                                                                                                                                                                                                                                                                                                                                                               284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104
                                   605
                                                                        584
                                                                                                                                                                                                                                                                 425
                                                                                                                                                                                                                                                                                                        404
                                                                                                                                                                                                                                                                                                                                                                                                                        305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTGGCGTATCATCTCCTCCATCGAACAGAAAGAATCCCGTGGTAACGACGACGACCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGAAATGGTTGAATTCATGGAAAAAGTCGCTGAAGCCGTTGACAAAGACGAACTCACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCG
                                                                                                                                                                                                                                                     AGGAACGTAAAGACGCTGCTGAACACACCCCTGGCTTACAAATCCGCTCAGGACATCG
                                                                                                                                                                                                                                                                                                                                                                                    GTATTCTTAAGCTTCTTGATACTAGACTTGTTCCTGCTTCTGCTAATGGAGATTCTAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                 GTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGAAGAACGTAATCTCCTCCCGTCGCTTACAAAAACGTAATCGGCGCTCGTCGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGAAGAACGTAACCTGCTGCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTCGGCGAGGGAAGAGTTCGTGTACCTCGCAAAGCTCGCAGAGCAAGCGGAACGTTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $=$
                                                                                                                                                    CTAATGCTGAATTGGCTCCAACGCATCCGATTCGTCTTGGTTTTGGCTTTGAATTTCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGACCACGATCCGTGATTACAGAAGCAAGATCGAATCTGAGTTATCGAAAATCTGTGACG
                            TCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCC
                                                                                                  TTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTT
                                                                                                                                                                                   CTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCG
                                                                                                                                                                                                                              <u>AAGAGAGGAAAGATGCTGCAGCATACTCTCACCGCTTACAAAGCTGCTCAGGATATTG</u>
                                                                                                                                                                                                                                                                                                        TTTTTACCTTAAGATGAAGGGAGATTATCATAGGTATTTGGCTGAGTTTAAGACTGGTC
                                                                                                                                                                                                                                                                                                                                         TTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGATGAAGCCATTGCTGAGTTAGATACTCTTGGAGAGGAGTCATACAAGGATAGTACCT
                                                                        TGTTTTÄCTATGAGATTCTTAATTCTCCAGATCGTGCTTGTAATCTCGCTAAGCAGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       thaliana columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 481.2; DB 46;
Pred. No. 8.8e-125;
0; Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
```

103

0

124

В Ś В Ş Ď, Ş 밁

5

유 성

β δ

유 g Ś

664

643 604 583 544 523

703

484

463 424 403 364 343 304 283 244 223

뮍 δ ₽ Ş 밁 Ş 망 δ B

```
ö
                                  763
                                                                                       764 GTCCGGAGGAGTTAAAGAAGCAGCACCAAAGCCTGCTGAAGAACAGAAGGAGATCT 823
TGATCATGCAGCTGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGACGACG 724
                                                                784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ccrcgcgagggagggrrcgrgraccrcgcaagcrcgcagagcaagggaaggrracg 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCG 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGGACG 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCCGGTGACTCCAAAG 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tritutacciraagahdaagadagariarcaragararrindecigaciriaagacraarc 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64
                    285 TGACCACGATCCGTGATTACAGAAGCAAGATCGAATCTGAGTTATCGAAATCTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCCGGCAGAGAACTGGTTTACATGGCTAGACTGGACGGAGGCTGAACGTTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          105 Aagaaarggrigaarrcarggaaaaadrcgcrgaagccgrrgacaaagacgaacraccg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           165 redaadaaderaarcreerereereerracaaaaceraareegeeereerere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTATTCTTAAGCTTCTTGATACTAGACTTGTTCCTGCTTCTGCTAATGGAGATTCTAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAACGTAAAGACGCTGCTGAACACCCCTGGCTGCTTACAAATCCGCTCAGGACATCG
                                                              TITICIACCIGAAAATGAAAGGIGACIACCACCGGIACCIGGCIGAGITIAAAACCGGIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGAAGAACGTAACCTGCTGCCGTTGCTTACAAAAQGTTATCGGTGCTCGTCGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                FOR PLANT IMPROVEMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 88; Length 1048;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 481.2; DB 88; Length
Pred. No. 8.8e-125;
0; Mismatches 188; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: CDS
LOCATION: (2).(826)
COTAION: (2).Clone ID: LIB3176-108-G9_FLI
US-60-312-544-3922
                                                                                                                                                                                                                                                                         APPLICANT: Cao, Yongwei
APPLICANT: Edgerton, Michael D
APPLICANT: Hinkle, Gregory J.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Liu, Jingdong
APPLICANT: Liu, Jingdong
APPLICANT: Liu, Jingdong
APPLICANT: Stein, Joshua
TILLE OF INVENTION: CDNA SEQUENCES AND USES FOR
FILE REFERENCE: 38-10(52726)A
CURRENT APPLICATION NUMBER: US/60/312,544
CURRENT FILING DATE: 2001-08-15
NUMBER OF SEQ ID NOS: 10730
SEQ ID NO 3922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Arabidopsis thaliana columbia
                                                                                                                                                                                                                                             ; Sequence 3922, Application US/60312544
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61.2%;
76.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 76.0
Matches 594; Conservative
                                                                                                                             AA 786
                                                                                                                                                             AA 825
                                                                                                                                                                                                             RESULT 15
US-60-312-544-3922
                             704
                                                             725
                                                                                                                             785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345
665
                                                                                                                                                             824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGIH:
                        g
                                                       ò
                                                                                     d
                                                                                                                           ò
                                                                                                                                                    쉼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
\delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
524
                                544
                                                              584
                                                                                                 604
                                                                                                                               644
                                                                                                                                                                 664
                                                                                                                                                                                                704
                                                                                                                                                                                                                                  724
                                                                                                                                                                                                                                                                  764
                                                                                                                                                                                                                                                                                                     784
                                                                                                                                                                                                                                                                                                                                     824
465 AAGAGAGAAAGATGCTGCTGAACATACTCTCACCGCTTACAAAGCTGCTCAGGATATTG
                                                                                                                                                                                                645 Trakrakadockiracidakarikakirackiradakadadakirarkakadakarkar
                                                                                                                                                                                                                                                                 705 rearcarccaccircircarcaacciracicricacaccircaccaccaccacaa
                                                                                                                                                                                                                                                                                                   725 CIGCIGACGAAAICAAAGAAGCIGCICCCGAAACCGAACCGAAGAACAGCAGGCIAGCI
                                                                                               545 ITTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTT
                                                                                                                                                                 605 TCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCC
                                                                                                                                                                                                                                  TGATCATGCAGCTGCTGACAACCTGACCTGTGGACCTCCGACATGCAGGACGACG
                                                                                                                                                                                                                                                                                                                                     765 GTCCGGAGGAGTTAAAGAAGCAGCACCAAAGCCTGCTGAAGAACAGAAGGAGATCT
                                                             525 craargergaarregerecaacecarecearregrerregrirgecrirgaarriere
                                                                                                                            585 IGITITACIAIGAGAIICIIAAIICICCCAGAICGIGCIIGIAAICICGCIAAGCAGGCGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                        7, 2004, 01:53:09
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Search completed: June
Job time : 4194 gecs
                                                                                                                                                                                                                                                                                                                                                                   AA 786
                                                                                                                                                                                                                                                                                                                                                                                                       AA 826
                                                                                                                                                                                                                                                                                                                                                                     785
                                485
                                                                                                                                                                                                                                  665
                                                                                                                                                                                                                                                                                                                                                                                                       825
                                                                                         8
                                                                                                                          g
                                                                                                                                                               ઠે
                                                                                                                                                                                            g
                              \delta
                                                           g
                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                               g
```

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
       11111
201008785432
                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
     seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                     Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

4: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

5: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*

6: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*

7: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*

9: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*

10: /cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*

11: /cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*

11: /cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*

12: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*

13: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*

14: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*

15: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*

16: /cgn2_6/ptodata/2/pubpna/US10R_PUBCOMB.seq:*

17: /cgn2_6/ptodata/2/pubpna/US10R_PUBCOMB.seq:*

16: /cgn2_6/ptodata/2/pubpna/US10R_PUBCOMB.seq:*

17: /cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*

18: /cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*

19: /cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*

19: /cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*
                                                                                                                                                                                                                                                          Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   June 6, 2004, 23:42:44 ; Search time 537 Seconds (without alignments) 6677.335 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-507-166-38
786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2995936 seqs, 2280998010 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 atggcttccggcagagaaga.....aagaacagcaggctagctaa 786
     Copyright
                                                                                                                                                                                                                                                          Length
     783
1004
11141
798
798
1172
768
927
768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                           B
                                                                                                                                         9 15
9 5 5 6
                                                                                                                                                                                          9 9 6
                                                                                                 .6 US-10-310-154-214
US-09-887-576-813
US-09-887-576-799
.6 US-10-310-154-220
.5 US-10-326-715-9
.5 US-09-338-842A-637
.1 US-09-938-842A-637
.1 US-09-938-842A-637
 US-09-887-576-790

US-09-938-842A-429

1 US-09-938-842A-429

US-09-887-576-789

3 US-10-412-699B-343

3 US-10-225-066A-789
                                                                                                                                                                                                                                                           Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              summaries
                                                                                                                                                                                                                                                                                                              SUMMARIES
Sequence 214, App
Sequence 813, App
Sequence 220, App
Sequence 220, App
Sequence 637, App
Sequence 637, App
Sequence 637, App
Sequence 790, App
Sequence 790, App
Sequence 429, App
Sequence 429, App
Sequence 343, App
Sequence 343, App
Sequence 789, App
                                                                                                                                                                                                                                                          Description
```

ALIGNMENTS

RESULT 1
US-10-310-154-214
; Sequence 214, App
; Publication No. 1 Publication
GENERAL INFORMATION:
APPLICANT: Edgerton, Michael
APPLICANT: Chomet, Paul S. APPLICANT
APPLICANT Chomet, rau.
Adams, Thomas H
Ruff, Thomas G. Luethy, Michael M. Lund, Adrian Madson, Linda L. Malloy, Kathleen A. McKiel, Christine L. Miller, Philip W. Duff, Stephen M.
Galligan, Meghan M.
Hinchey, Brenda S.
Huang, Shihshieh
Johnson, G. Richard Boddupalli, Ra Deikman, Jill Deng, Molian Dong, Jinzhuo Agarwal, Ameeta Ahrens, Jeffrey Ball, James A. Kretzmer, Keith A Laccetti, Lucille Lai, Chao-Qiang Jung, Lu, Bin Application US/10310154 o. US20030233670A1 'n, Gary Jie-Yi Jingdong erin Vincent Raghava U W

```
372 CCTGAAAATGAAAGGTGACTACCACGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACG 431
                      614 CTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATGC
                                                                                                                                                                                                                                                                                                                                                                           of plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 55.0%; Score 432.2; DB 9; Best Local Similarity 72.8%; Pred. No. 4.3e-132; Matches 557; Conservative 0; Mismatches 208;
                                                                                                                                                                                                RESULT 2
US-09-887-576-813

Sequence 813, Application US/09887576
Patent No. USZ002014647A1
GENERAL INFORMATION:
APPLICANT: Budworth, P.
APPLICANT: Chang, H.
APPLICANT: Chang, H.
APPLICANT: AND COOPE', Bret
TILE OF INVENTION: Promoters for regulation of TILE OF INVENTION: Promoters for regulation of TILE OF INVENTION: Promoters for regulation of TILE OF INVENTION: PROMOTES: 1360.001US1
CURRENT PELICATION NUMBER: US/09/887,576
CURRENT PILING DATE: 2000-06-25
PRIOR APPLICATION NUMBER: US 60/213,848
PRIOR FILING DATE: 2000-06-25
PRIOR APPLICATION NUMBER: US 60/214,087
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-12-29
NUMBER OF SEQ ID NOS: 875
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 813
LENGTH: 789
                                                                                                                                 734 AAATCAAAGAAGCTGC 749
                                                                                                                                                    TYPE: DNA
CORGANISM: Oryza sativa
US-09-887-576-813
                                           d
                                                                         장 염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               494 AGGAAGCCGCCAGAGAGCACCTCCGCCTACAAAGCCGCTCAGGACATTGCTAAAAACCGG 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTGA 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             374 AGCTCCTCGACACGCGCCTCCTCCCCTCCGCCCTCCGGCGACTCCAAGGTCTTCTACC 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434 TCAAGATGAAGGAGACTACCACAGGTACCTCGCTGAGTTCAAGACGGGCGCGCGAGGGA 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          434 AAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCTG 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494 AACTGGCTCCGACCCGATCCGTCTGGGTCTGGGCTCTGAACTTCTCCGTTTTCTACT 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         554 ACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAAG 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAAACCGGTCAGGAACGTA 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 GCGAAGAGTICGIGIATACAIGGCGAAGCIGGCGGAGCAGGCCGAGCGCIACGAGGAGIAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194 GCAACCTCCTCTCCGTCGCCTACAAGAACGTAATCGGCGCTCGGCGCCCGCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254 TCATCTCCTCCATTGAGCAGAAGGAGAGGAGCCGCGGCAACGAGGACCACGTCGCCGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACTGCTGGACTCCCGGTCTGATCCCGGCTGCTTCCCGGTGACTCCCAAAGTTTTCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14 GAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTAACCTGCTGTCGGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACGTTACCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
Query Match

S8.4%; Score 459.2; DB 16; Length 1092;
Best Local Similarity 76.5%; Pred. No. 5.8e-141;
Matches 563; Conservative 0; Mismatches 173; Indels 0;
                                                                                                                                                                                                                                                                                                                                              | FEATURE:
| NAME/KEY: CDS
| LOCATION: (49)..(834)
| OTHER INFORMATION:
| US-10-310-154-214
                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ର ପ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $ B $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
장
원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ેં
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

203 733 733 131 143 132 ACGTAACCTGCTCCGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCG 191 251 204 CATTATCTCCTCCATTGAGCAGAAGGAGAAAGCCGTGGTAACGAGAACGTGTCACACT 263 311 323 312 GAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCCAAAGTTTTCTA 371 83 72 GGITGAATICATGGAAAAGTITCCGCTGCTGTGACGGTGACGAACTGACGGTTGAAGA 674 CTATTGCTGAATTGGATACGTTGGGAAGGAATCATACAAGGATAGCACTTTGATCATGC 24 CCGTGAGGAGAATGTGTACATGGCCAAGCTCGCTGAGCAAGCCGAGAGGTACGAGAGAT 144 GCGCAACCTCCTGTCTTGCATACAAGAATGTGATTGGAGCCCGCCGTGCGTCATGGCG 192 TATCATCTCCTCCATCGAACAGAAGAATCCCGTGGTAACGACGACCACGTTACCGC 252 TATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCT 264 CATCAAGGACTACCGTGGCAAGATCGAGACTGAGCTYACCAAGATTTGCGACGGCATTCT 674 AGCTGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGACGACGCTGCTGACG 12 CAGAGAAGAACTGGTTTACATGGCTAGACTGGTGAACAGGCTGAACGTTACGAAGAAAT ö Length 789; Indels

```
APPLICANT: CLARY; ...
APPLICANT: Han, B.
APPLICANT: Han, B.
APPLICANT: Han, B.
APPLICANT: Wang, X.
APPLICANT: Wang, X.
APPLICANT: Cooper, Sret
FILE OF INVENTION: Promoters for regulation of
FILE REFERENCE: 1360.001US1
CURRENT APPLICATION NUMBER: US/09/887,576
CURRENT FILING DATE: 2001-06-25
PRIOR APPLICATION NUMBER: US 60/213,848
PRIOR APPLICATION NUMBER: US 60/213,848
PRIOR APPLICATION NUMBER: US 60/214,087
PRIOR FILING DATE: 2000-06-23
PRIOR PELING DATE: 2000-06-23
PRIOR PELING DATE: 2000-12-29
NUMBER OF SQ ID NOS: 875
SOFTWARE: FastSEQ for Windows Version 4.0
SSEQ ID NO 799
LENGTH: 783
TYDE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                        Ş
                                                                                                   В
                                                                                                                                                 δ
                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-09-887-576-799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Oryza sativa
US-09-887-576-799
                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Budworth, P.
APPLICANT: Brown, D.
APPLICANT: Chang, H.
APPLICANT: Zhu, T.
APPLICANT: Han, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 799, Application US/09887576 Patent No. US20020144047A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                             Local Similarity
nes 545; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    444 GAAGGATGCTGAGAATACCATGGTGGCATACAAGGCTGCTCAGGACATTGCTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  384
                                                    134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 744
                                                                                                        83
                                                                                                                                                             74
                                                                                                                                                                                                                    23
                                GTAACCIGGIGTGCCGTIGCCITACAAAAACGTTAICGGIGCTCGIGCTIGCTIGCCGIAC
                                                                                                                                                       TTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCGTTGAAGAAC
                                                                                                                                                                                                                                                             GAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGATCAGGGAAGCTCCGAAGCGCGACTCCAGCGAGGGGCAGTA 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACGCTGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCCATCTCGGAGCTGGACACCCTGAGCGAGGAGTCCTACAAGGACAGCACTTTGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAAAGACGCTGCTGAACACACCCTGGCTGACAAATCCGCTCAGGACATCGCTAACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCAAAATGAAGGGTGACTACTACAGGTACCTTGCCGAATTTAAGACCGGGGCTGAGAG
                                                                                                                                                                                                                 GTGAGGAGAATGTGTACATGGCAAAGCTTGCCGAGCAGGCTGAGCGTTACGAGGAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAAATCAAAGAAGCTGCTGCTCCGAAACCGACCGAAGAACAGCA 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAACTCCTCCGTGATAACCTGACCCTGTGGACTTCAGACATCTCGGAGGACACCGCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATGAGATCCTCAACTCGCCTGATCGTGCTTGCAACCTCGCAAAGCAGGCTTTTGATGA
                                                                                                           TCGAATTCATGGAGAAGGTGGCAAAGACCACTGATGTTGGTGAGCTCACCGTTGAGGAGC
                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                             54.0%; Score 424.4; DB 9; 73.1%; Pred. No. 1.6e-129; tive 0; Mismatches 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of plant expression
                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      611
                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     443
                                                                                                           142
                                                                                                                                                                133
                                                                                                                                                                                                                       82
                                                                                                                                                                                                         Sequence 220, Application US/10310154

Publication No. US20030233670A1

GENERAL INFORMATION:
APPLICANT: Edgerton, Michael D
APPLICANT: Adams, Thomas H
APPLICANT: Adams, Thomas H
APPLICANT: Adams, Thomas H
APPLICANT: Adams, Jeffrey E.
APPLICANT: Appricant: Appricant: Appricant: Appricant: Appricant: Appricant: Appricant: Banu, G.
APPLICANT: Banu, G.
APPLICANT: Bell, James A.
APPLICANT: Deikman, Jill
APPLICANT: Dong, Jinzhuo
APPLICANT: Dong, Jinzhuo
APPLICANT: Galligan, Meghan M.
APPLICANT: Galligan, Meghan M.
APPLICANT: Hinchey, Berenda S.
APPLICANT: Hinchey, Berenda S.
APPLICANT: Hinchey, Berenda S.
APPLICANT: Johnson, G. Richard
ADBLICANT: Johnson, G. Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 4
US-10-310-154-220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        덩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                    Kretzmer, Keith A
Laccetti, Lucille I
Lai, Chao-Qiang
Lee, Gary
Lin, Jie-Yi
Liu, Jingdong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAATCAAAGAAGCTGCTGCTCCGAAA 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCTGCTGAGAGAACCTGACCCTGTGGACCTCCGACATGCAGGACGACGACGTGCTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAGATACTGAACTCACCAGACCGTGCTTGCAACCTTGCAAAGCAGGCGTTCGACGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTGCCTACAACTCACCCGATAAGGCTTGGACTTGCACTGAACTTCTCAGTGTTCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACTGGCTCCGACCCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , америсостори в праводника в применти в прим
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTTCTGGATTCCCACCTTGTCCCATCTGCCACTGCTGCAGAGTCCAAGGTGTTCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACTGCTGGACTCCGGTCTGATCCCGGCTGCTGCTTCCGGTGACTCCAAAGTTTTCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTAAGGAGTACCGTAGCAGGATTGAAACTGAGCTCAGCAAGATCTGTGATGGTATCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCATCTCTTCTATTGAGCAGAAGGAGGAGGAGGCCGTGGGAATGAGGCATATGTTGCATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACGTTACCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGATCAAGGAAGCAGCGAAGCCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACTTCTTCGTGACAATCTGACTCTCTGGACCTCTGACAATGCGGAGGATGGTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATTGCTGAACTGGACACTCTTGGCGAGGAGTCTTACAAGGACAGCACCTTGATCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGAAGCAGCTGAGAACACTCTTGTGGCATACAAGTCTGCCCAGGATATTGCACTCGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAAAATGAAGGGTGACTACCACAGGTACCTTGCTGAGTTTAAGTCAGGAGCTGAGAGGA
                                                                                                                                                                                       Jung, Vincent
                                                                                                                                        W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     768
```

562 562 613

682

742

493

4433

373

```
Sequence 9, Application US/10226715
Publication No. US20030099984A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: SILBERTOR AND METHODS OF USE
FILE OF INVENTION: SILBERTOR AND METHODS OF USE
FILE REPRENCE: 017575.0693 (TAMUS 1743)
CURRENT FILING DATE: 2002-08-23
PRIOR APPLICATION NUMBER: 60/314863
PRIOR FILING DATE: 2001-08-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           231
                                                                                                                                                                                                                                          673
                                                                                                                                                                                                                                                                                                       687
                                                                                                                                                                                                                                                                                                                                                                           733
                                                                                                                                                                                                                                                                                                                                                                                                                                 AACTICITICATION TO THE CONTROL OF THE AACTICATION O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             73 GTTGAATTCATGGAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCGTTGAAGAA 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                232 deraaccrecrereresedarakeaarerearredeserresedeserreareses 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313 AAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCCAAAGTTTTCTAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              531
                                                                                                        613
                                                                                                                                                                     627
ACCTGCCTACAACTCACCCGATAAGGCTTGGACTTGCACTGAACTTCTCAGTGTTCTACT 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72
                                                                                                                                                                                                                                                                                                          628 CTATTGCTGAACTGGACACTCTTGGCGAGGAGTCTTACAAGGACAGCACCTTGATCATGC
                                                                                                                                                                                                                                                                                                                                                                           AGCTGCTGCGTGACCAACCTGACCCTCTGCGACATGCAGGACGACGCTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       172 Grighgiararddagaddagcraagacrdradargrigaagagcreacrdragagdag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    193 ATCATCTCCTCCATCGAACAGAAGAATCCCGTGGTAACGACGACCACGTTACCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     292 Arreficircriccarreaacadaddagdagdcccgraagaaddaadagdcardreaaccrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253 ATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     412 AAACTGCTTGACTCCCACCTAGTGCCTTCCTCTACTGCTGCTGAATCAAAGGTCTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ses argagaracidaacicaccagaccgigcrigcaaccirgcaagcaagcgircgacgarg
                                                                                                                                                                                                                                          CTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     112 AgggAggAgaTgTTTACATGGCCAAGCTGGCTGAGCAGGCCGAAAGGTATGAGGAGTTG
                                                                                                        554 ACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               133 CGTAACCTGCCGGTGCCTTACAAAACGTTATCGGTGCTCGTGCTTCCTGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 53.5%; Score 420.8; DB 15; Best Local Similarity 71.7%; Pred. No. 3.1e-128; Matches 551; Conservative 0; Mismatches 217;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; LENGTH: 1141
; TYPE: DNA
; ORGANISM: Saccharum hybrid cultivar CP72-1210
US-10-226-715-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             734 AAATCAAAGAAGCTGCTGCTCCGAAA 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          748 AGATCAAGGAAGCAGCGAAGCCTGAA 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin version 3.1
SEQ ID NO 9
                                                                                                                                                                                                                                          614
                                                                                                                                                                                                                                                                                                                                                                           674
                                                                                                                                                                                                                                                                                                                                                                                                                                                688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                 ò
                                                                                                                                                              P
                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                           ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           74 TIGAATICATGGAAAAAGITICCGCTGCTGTTGACGGTGACGAACTGACCGTTGAAGAAC 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88 TCGAATTCATGGAGAAGGTGGCAAAGACCACTGATGTTGGTGAGCTCACCGTTGAGGAGC 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        148 GGAACCIGCTTTCTGTGGCTTACAAGAACGTGATTGGTGCTCGGAGGGCATCGTGGAGGA 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194 TCATCTCCATCGAACAGAAAGAATCCCGTGGTAACGACGACGATTACCGCTA 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTGA 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          328 AGCTTCTGGATTCCCACCTTGTCCCATCTGCCACTGCAGAGTCCAAGGTGTTCTACC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434 AAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCTG 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             448 AGGAAGCAGCTGAGAACACTCTTGTGGCATACAAGTCTGCCCAGGATATTGCACTCGCTG 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     494 AACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTACT 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        268 TTAAGGAGTACCGTAGCAGGATTGAAACTGAGCTCAGCAAGATCTGTGATGGTATCCTTA 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCCCAAAGTTTTCTACC 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              374 TGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGTA 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          388 IGABABATGABAGGGTGACTACCACAGGTACCTTGCTGAGTTTAAGTCAGGAGCTGAGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGAGAATGTGTACATGGCAAAGCTTGCCGAGCAGGCTGAGGGTTACGAGGAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTAACCTGCTGTCCGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               208 icarcicirioratudageageageageegeegegaardageeratageareaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14 GAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 54.0%; Score 424.4; DB 16; Length 1004; Best Local Similarity 73.1%; Pred. No. 1.9e-129; Matches 545; Conservative 0; Mismatches 201; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Zhao, Yajuan APPLICANT: Zhao, Yajuan APPLICANT: Zhao, Li TITLE OF INVENTION: Gene Sequences and Uses Thereof in Plants FILE REPERBNCE: 38 - 15 (52796) B CURRENT APPLICATION NUMBER: US/10/310,154 CURRENT FILING DATE: 2002-12-04 PRIOR APPLICATION NUMBER: 60/337,358 PRIOR FILING DATE: 2001-12-04 SEQ ID NO 220 ID NOS: 736 SEQ ID NOS: 736
                                                      Madson, Linda L.
Malloy, Kathleen A.
Malloy, Kathleen A.
Malloy, Kathleen A.
Miller, Philip W.
Padmavathi, Manchikanti
Parnell, Laurence D.
Start, William G.
Tennesen, Dan
Vidya, K.R.
Wang, Haiyun
Xin, Zhanguo
Xin, Zhanguo
Xin, Zhanguo
Xin, Alaiyun
Xin, Yangui
       Michael M.
Luethy, Michar
Lund, Adrian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: CDS
; LOCATION: (6)..(785)
; OTHER INFORMATION:
US-10-310-154-220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             314
                                                                                             APPLICANT
```

ò 셤 ઠે Db õ g ð 임 ò ద ò g ò g ò ò

ច

360

540 480 480 420 420

540

600

```
APPLICANT: Kreps, Joel
APPLICANT: Wang, Xun
APPLICANT: Wang, Xun
APPLICANT: Wang, Xun
APPLICANT: Wang, Xun
TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING
TITLE OF INVENTION: SAME, AND METHODS OF USE
FILE REFERENCE: SCRIP1300-3
CURRENT APPLICATION NUMBER: US/09/938,842A
CURRENT APPLICATION NUMBER: US 60/227,866
PRIOR APPLICATION NUMBER: US 60/227,866
PRIOR FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR FILING DATE: 2001-06-22
NUMBER OF SEQ ID NOS: 5379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 6
US-09-938-842A-637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                 밁
                                                                                    Š
                                                                                                                                 망
                                                                                                                                                                5
                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Arabidopsis thaliana US-09-938-842A-637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 637
LENGTH: 798
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 637, Application US/09938842A Patent No. US20020160378A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                 181
                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                      547; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
        241
                                                                                                                                 121
                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     772
                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                           6
                                                                         GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                    ACCGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGT 180
                                                                                                                                                                                                                                                  TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG 120
                                                                                                                                                                                                                                                                                                                            ATGGCTTCCGGCAGAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCIGCIGCGIGACAACCIGACCCIGIGGACCICCGACAIGCAGGACGACGCIGCIGAC 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATGAGATTCTGAACTCCCCAGACAAAGCTTGCAACCTTGCAAAGCAGGCGTTTGATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAA 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGCTGGCACCTACACATCCGATAAGGCTTGGGCTTGCTCTTAACTTCTCAGTGTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTAC 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGAATCTGCTGAGAGCACAATGGTAGCCTACAAGGCTGCTCAGGACATTGCTCTGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCT 492
      CACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC
                                              ACTGTCGAAGAGAGAAACCTCTTGTCTGTTGCTTACAAGAACGTCATTGGTGCTAGGAGA 180
                                                                                                                                                                                                                 TATGAGGAAATGGTTGAGTTCATGGAGAAAGTTGCAAAGACTGTTGACACCGATGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGGGCAAAGAAGCCTCAAAAGGTGATGCTGGCGAGGGACAGTAATCT 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATCAAAGAAGCTGCTGCTCCGAAACCGGACCGAAGAACAGCAGGCT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTATCTCTGAGTTAGACACCCTTGGGGGAGGAGTCATACAAAGATAGCACTCTGATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATG
                                                                                                                                                                                                                                                                                                 ATGTCGTCTTCTCGGGAAGAGAATGTGTACTTAGCCAAGTTAGCTGAGCAAGCTGAACGT
                                                                                                                                                                                                                                                                                                                                                                               52.6%; Score 413.2; DB 9; 71.0%; Pred. No. 8.4e-126; tive 0; Mismatches 223;
                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                            Length 798;
                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        651
                                                                                      240
                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        591
                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           672
                        S
                                                                  밁
                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-938-842A-637; Sequence 637, Application US/09938842A; Publication No. US20040009476A9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                     US-09-938-842A-637
                                                                                                                                                                                                                                                                                                            APPLICANT: Wang, Xun
APPLICANT: Wang, Xun
APPLICANT: Zhu, Tong
TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING
TITLE OF INVENTION: SAME, AND METHODS OF USE
TILE REFERENCE: SCRIP1300-3
CURRENT APPLICATION NUMBER: US/09/938,842A
CURRENT APPLICATION NUMBER: US 60/227,866
PRIOR APPLICATION NUMBER: US 60/227,866
PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR PRIOR TILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/364,647
PRIOR FILING DATE: 2001-01-6
PRIOR APPLICATION NUMBER: US 60/300,111
PRIOR FILING DATE: 2001-06-22
NUMBER OF SEQ ID NOS: 5379
SEQ ID NO 637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Harper, Jeff
                                                                                                                                                     Matches
                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                       TYPE: DNA ORGANISM: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                 LENGTH: 798
                                                                                                                                                                       Match 52.6%;
Local Similarity 71.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCC
                                                                                                                                                   547; Conservative
61 TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATGTTTCCATTATCAAGGACTACAGAGGAAAGATCGAAACTCAGCAAAATCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAAACC
                                                                     ATGTCGTCTTCTCGGGAAGAGAATGTGTACTTAGCCAAGTTAGCTGAGCAAGCTGAACGT
                                                                                                          ATGGCTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGCGGGCGGTGATGAGATCAAGGAGGCGTCAAAACATGAGCCGGAAGA 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCCTGATCATGCAGCTGCTGCGGGACAACCTGACCCTGTGGACCTCCGACATGCAGGAC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGCACTTGCTGATTTAGCTCCTACTCCATCCGATTAGACTGGGACTTGCTCTTAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCGCTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGGTCTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAGCTGAGAGGAAGGAAGCTGCTGAGAGCACTCTGGTTGCTTACAAGTCAGCTCAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                egrcaegaaceraaagacecrecreaaacacacccreecrecriacaaarccecreaegac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANAGT CTTTTACCT CANAATGAAAGGAGATTACCACAGGTACCTTGCTGAGTTTAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGGAATACTCAATCTTCTGGATTCTCACCTTGTTCCCACTGCATCTTTGGCCGAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACGTTGATAÀTGCAACTTCTCCGTGACAATCTGACCCTTTGGAACTCTGACATCAATGAT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTTTGATGAGGCCATTTCTGAGCTGGATACATTAGGAGAAGAATCATACAAAGACAGT 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGTCTTCTACTACGAGATTCTCAACTCACCTGATCGTGCCTGCAGTCTCGCAAAACAG
                                                                                                                                                Score 413.2; DB 11;
Pred. No. 8.4e-126;
O; Mismatches 223;
                                                                                                                                                     Indels
                                                                                                                                                                                             Length
                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          770
                                                                                                                                                   Gaps
```

60

Chao-Qiang

```
q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                  181 GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAGAATCCCGTGGTAACGACGAC 240
                                                                                                                                                                                                                                                                                                                                                                        241 CATGITICCATIATCAAGGACTACAGAGGAAGGATCGAAACTGAACTCAGCAAAATCTGT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 GATGGAATACTCAATCTTCTGGATTCTCACCTTGTTCCCACTGCATCTTTGGCCGAGTCC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
TATGAGGAAATGGTTGAGTTCATGGAGAAAGTTGCAAAGACTGTTGACACCGATGAGCTT 120
                                                                                                                     121 Actigrosasasasas concristor de reconsola de la consta del la consta de la consta del la consta del la consta del la consta de la consta de la consta del la consta de la consta del la consta del la consta de la consta de la consta del la consta del la consta del la consta del la consta de la consta de la consta de la consta del la consta dela consta del la consta del la consta del la consta del la consta 
                                                                                                                                                                                                                                                  CACGITACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                           GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361 AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCAGGAACGTAAAGACGCTGCTGAACACCCTGGCTGCTTACAAATCCGCTCAGGAC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGCTGAGAGGAAGCTGCTGAGAGCACTCTGGTTGCTTACAAGTCAGCTCAGGAT 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481 Arrideacriderdarriaderectaeredaredariadaeridadaerideretraaerid 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541 TCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541 rerererreraciadarrereadredendarendarendendendenenenadaka 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTTTTGATGAGGCCATTTCTGAGCTGGATACATTAGGAGAAGAATCATACAAAGACAGT 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCIGATCATGCAGCTGCTGACAACCTGACCTGTGGACCTCCGACATGCAGGAC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661 ACGTTGATAATGCAACTTCTCCGTGACAATCTGACCCTTTGGAACTCTGACATCAATGAT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGCTAAACGCTGGCTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACGCTGCTGACGAAATCAAAGAAGCTGCTCCGAAAAACCGAACGA 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGCGGCGGTGATGAGATCAAGGAGGCGTCAAAACATGAGCCGGAAGA 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 219, Application US/10310154 Publication No. US20030233670A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Galligan, Meghan M.
Hinohey, Brenda S.
Huang, Shihshieh
Johnson, G. Richard
Jung, Vincent
Kretzmer, Keith A
Laccetti, Lucille B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Edgerton, Michael D
APPLICANT: Chomet, Paul S.
APPLICANT: Adams, Thomas H
APPLICANT: Ruff, Thomas G.
APPLICANT: Agarwal, Ameeta K.
APPLICANT: Agarwal, Ameeta K.
APPLICANT: Ball, James A.
APPLICANT: Ball, James A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bell, Erin
Boddupalli, Raghava
Deikman, Jill
Deng, Molian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , Jinzhuo
, Stephen M.
19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                            121
                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
APPLICANT
APPLICANT
APPLICANT
APPLICANT
                                                         ઠે
                                                                                                           D
                                                                                                                                                                 ò
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

```
133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  328 TCAAGGAGTACCGTGGCAAGATTGAAGCTGAGCTGAGCAAGATTTGCGGATGGTATCCTGA 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGTA 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88 gegagagaareteracaregeeraageregeegageagereaaagrareagagaree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74 TIGAATICCATGGAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGAAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   148 TTGAGTACATGGAGAAGGTTGCAAAGACTGTAGATGTGGAAGAGCTCACTGTTGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134 GTAACCTGCTGCCGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194 TCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACGTTACCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           314 AACTGCTGCACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCCAAAGTTTTCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   388 AGTIGCTIGACICACACCTIGIGCCCTCATCTACTGCTGCAGAATCTAAGGIGTTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  208 gcaaccicrigiciriscriacaagaarerearingereceeeerecerecreere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   268 TTGTCTCATCCATTGAACAGAAGGAGGGTCGTCGTGGCAATGAGGAACATGTTACTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254 TCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14 GAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52.3%; Score 411.4; DB 16; Length 1172; 72.6%; Pred. No. 4e-125; ive 0; Mismatches 201; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Gene Sequences and Uses Thereof in Plants FILE REFERENCE: 38-15(52796)B
CURRENT PILLICATION NUMBER: US/10/310,154
CURRENT FILLICATION NUMBER: 00/312-04
PRIOR APPLICATION NUMBER: 60/337,358
PRIOR FILLING DATE: 2001-12-04
NUMBER OF SEQ ID NOS: 736
SEQ ID NO 219
                                                                                                                                                                                 Padmavathi, Manchikanti
Parnell, Laurence D.
Start, William G.
Tennesen, Dan
                                                                                                    Madson, Linda L.
Malloy, Kathleen A.
McKiel, Christine L.
Miller, Philip W.
                                     Lu, Bin
Luethy, Michael M.
Lund, Adrian
                                                                                                                                                                                                                                                                                                                                                Yang, Chunzhi
Zeng, Xiaoping
Zhang, Qiang
Zhao, Yajuan
Zhou, Li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 72.6'
Matches 532; Conservative
Jie-Yi
                                                                                                                                                                                                                                                               Vidya, K.R.
Wang, Haiyun
Xin, Zhanguo
Xu, Nanfei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Oryza sativa
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; NAME/KEY: CDS
; LOCATION: (81)...(848)
; OTHER INFORMATION:
US-10-310-154-219
                                                                            APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    448
                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                               APPLICANT
```

```
APPLICANT: Zhu, T.
APPLICANT: Han, B.
APPLICANT: Wang, X.
APPLICANT: Cooper, Bret
TITLE OF INVENTION: Promoters for regulation of
FILE REFERENCE: 1360.001US1
CURRENT APPLICATION NUMBER: US/09/887,576
CURRENT FILING DATE: 2001-06-25
PRIOR APPLICATION NUMBER: US 60/213,848
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR APPLICATION NUMBER: US 60/214,087
PRIOR FILING DATE: 2000-12-29
NUMBER: OF SEQ ID NOS: 875
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 790
LENGTH: 798
TYPE: DNA
ORGANISM: Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9
US-09-887-576-790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 790, Application US/09887576 Patent No. US20020144047A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 554; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Budworth, P. APPLICANT: Brown, D. APPLICANT: Chang, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                    181
                                                                                            121
                                                                                                                                                                     73
                                                                                                                                                                                                           22
                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                         AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCCGTGGTAACGACGAC
                                                                                                                                                                       GTTGAATTCATGGAAAAAGTTTCCGCTGCTGA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAATCAAAGAAGC 746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTTGCTCCCACCCATCCCCATAAGGCTTGGACTGGCACTTAACTTCTCTGTGTTCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGGTCTGAACTTCTCCGTTTTCTACT
                                                          ACGGTGGAGGAGCGGAACCTGCTGTCCGTGGCGTACAAGAACGTCATCGGCGCCCCGCCGC
                                                                                                                                   AGGTGAAAGAAGC 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTCCTGAGGGACAACTTGACCCTCTGGACCTCTGACCTCACGGAGGACGGTGGTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACGCTGCTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCATCTCCGAGTTGGATACCCTCGGGGAGGAGTCTTACAAGGACAGCACTTTGATCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACGAGATTCTAAACTCTCCAGACAAGGCTTGCAACCTTGCTAAGCAGGCGTTTGACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAAGCTGCTGAGAGCACAATGGTGGCTTACAAGGCTGCTCAGGATATTGCTCTGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCTG
                                                                                        ACCGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGT
                                                                                                                                                                                                             AGGGAGGAGCGTGTACAAGGCGAAGCTGGCGGAGCAGGCGGAGCGGTACGAGGAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brown, D.
Chang, H.
Zhu, T.
                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                    51.8%;
                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                  Score 407.2; DB 9;
Pred. No. 8.1e-124;
0; Mismatches 208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of plant expression
                                                                                                                                                                                                                                                                                      Indels 12;
                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                     -CGGTGACGAACTG 120
                                                                                                                                                                                                                                                                                  Gaps
                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                    240
                                                        201
                                                                                                                                   141
                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                 72
                                                                                                                                                                                                                                           APPLICANT: Harper, Jeff
APPLICANT: Kreps, Joel
APPLICANT: Kreps, Joel
APPLICANT: Mang, Xun
APPLICANT: Zhu, Tong
TITLE OF INVENTION: STRESS-REGULATED GENES OF PLI
TITLE OF INVENTION: SAME, AND METHODS OF USE
FILE REFERENCE: SCRIP1300-3
CURRENT APPLICATION NUMBER: US/09/938,842A
CURRENT FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: US 60/227,866
PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR FILING DATE: 2001-01-16
PRIOR FILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR FILING DATE: 2001-01-16
PRIOR FILING DATE: 2001-06-22
NUMBER OF SEQ ID NOS: 5379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 10
US-09-938-842A-429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
  밁
                              S
                                                                                                                                                         US-09-938-842A-429
                                                                            Best Loc
Matches
                                                                                                                                                                   NUMBER OF SEQ ID NOS: 5379
SEQ ID NO 429
LENGTH: 768
TYPE: DNA
ORGANISM: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 429, Application US/09938842A Patent No. US20020160378A1 GENERAL INFORMATION:
                                                                                                                Query Match
                                                                            Local Sines 539;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 CACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202 GCGTCGTGGCGGATCATCTCGTCGATCGAGCAGAAGGAGGAGGGCCGCGGGAACGACGCC
                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>ÀAGGTCTTCTÀCCTCÀAGÀTGÀÀGGGCGÀCTÀCCACAGGTACCTTGCGGAGTTTAAGTCT</u>
                            AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCCTGATCATGCAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGAC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGTTTGATGAGGCCATATCAGAACTGGACAGCCTTGGTGAAGAATCCTACAAGGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGTGTTCTACTATGAGATCTTGAACTCCCCTGACCGTGCCTGCAACCTCGCGAAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCGCTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gercaegaaceraaagacecrecreaacacacccrecrecracaaarccecreaegac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAGTITTCTACCTGAAAATGAAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACGCCGCCACCATCCGCTCCTACAGGGGCAAGATCGAGGCCGAGCTCGCCCGCATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGGTGGTGACGAAATCAAGGAAGCCGCAGCTCCAAAAGAGCCTGGGGATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTITGATCATGCAGCTCCTGCGTGACAACTTGACTCTGTGGACTTCAGATGCCAATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCGACGAGAGGAAGCAGGCTGCGGAGAGCACCATGAATGCATACAAGGCTGCTCAGGAC
    AGGGAAGAGAATGTTTACATGGCGAAATTAGCCGAACAAGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTGCTCTCGCAGATTTGGCTCCGACCCACACATAAGGCTTGGGCTTGCACTCAACTTT
                                                                          51.8%; Score 407; DB 9;
larity 71.0%; Pred. No. 9.3e-124;
Conservative 0; Mismatches 220;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             PLANTS, TRANSGENIC PLANTS CONTAINING
                                                                                                              Length 768;
                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      741
                                                                            0
```

밁 8 밁 δ 몽 Ş δ 밁 Ś 밁 δ В Š D) S 밁

69

Gaps

ö

768;

252 249 309

369 432

```
AAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGGTGACTCCAAAGTTTTCTAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               370 crraagargaagggrgarrarcaraggrarcrrgcrgagrrraaggcrggrgcrgaaagg 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACGACGCTGCTGAC 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10 AGGGAAGAGATGTTTACATGGCGAAATTAGCCGAACAAGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                        73 GTTGAATTCATGGAAAAGTTTCCGCTGCTGTTGACGGTGACGGACTGACCGTTGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                             133 CGTAACCTGCTCCGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    190 ATCATTTCTTCGATTGAGCAGAAGAAGAAGAGGAAGGGAACGAAGATCATGTTGCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       250 ATCAAGGATTACAGAGGAAGATTGAATCCGAGCTTAGCAAAATCTGTGATGGGATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATGTTCTTGAAGCTCATCTTATTCCTTCTGCTTCACCAGCTGAATCTAAAGTGTTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       430 AAAGAAGCTGCTGAAAGCACTTTGGTTGCTTACAAGTCTGCTTCCGACATTGCCACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGTTAGCTCCTACTCACCCGATAAGGCTTGGTCTTGCACTCAACTTCTCTGTGTTTTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 610 GCAATCGCTGAGTTAGATACATTGGGTGAGGAATCATACAAGGACAGTACACTGATTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 AGGAATCTTCTCTCTTGCTTACAAGAACGTGATTGGAGCGAGAAGAGCTTCGTGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACGTTACCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGACGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCT
                                                                                                                                                                                                          13 AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACG
                                                                                                                                                      Indels
                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           733 GAAATCAAAGAAGCTGCTGCTCCGAAACCGACGAAGAA 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGATTAAGGAGCATCAAAGCCCGATGGTGCCGAGTAA 768
                                                                                                  Score 407; DB 11;
Pred. No. 9.3e-124;
0; Mismatches 220;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 789, Application US/0988756; Sequence 789, Application US/0988756; Patent No. US20020144047A1; GENERAL INFORMATION: APPLICANT: Brown, D.; APPLICANT: Chang, H. APPLICANT: Han, B.; APPLICANT: Wang, X.; APPLICANT: Wang, X.; APPLICANT: Cooper, Bret
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-938-842A-429
                                                                                               Query Match
Best Local Similarity 71.0%;
Matches 539; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-887-576-789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             730
                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Harper, Jeff
APPLICANT: Harper, Jeff
APPLICANT: Kreps, Joel
APPLICANT: Kreps, Joel
APPLICANT: Areps, Joel
TITLE OF INVENTION: SAME, AND METHODS OF DLANTS, TRANSGENIC PLANTS CONTAINING
TITLE OF INVENTION: SAME, AND METHODS OF USE
FILE REFERENCE: SCRIP1300-3
CURRENT FILING DATE: 2001-08-24
CURRENT FILING DATE: 2000-08-24
PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR APPLICATION NUMBER: US 60/300,111
PRIOR FILING DATE: 2001-06-22
NUMBER OF SEQ ID NOS: 5379
SEQ ID NO 429
LENGTH: 768
                                                                                                                                                                                                                                                                                                                                      312
                                                                                                                                                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           432
                                                                                                                           192
                                                                                                                                                         130 AGGAATCTTCTCTCTGTTGCTTACAAGAACGTGATTGGAGCGAGAAGAGCTTCGTGGAGA 189
                                                                                                                                                                                                                                                                               249
                                                                 GTTGAATTCATGGAGAAGTTGCGAAACTGTTGATGTTGAGGAACTTTCAGTTGAAGAG 129
                                                                                                                                                                                                                                252
                                                                                                                                                                                                                                                                                                                                                                               Arcangarrachagaganagarradangarchaganagarcharachagarrard 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 732
                           CGAACTGACCGTTGAAGAA 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCTGCTGCGTGACCTGACCTGTGGACCTCCGACATGCAGGACGACGCTGCTGAC
                                                                                                                     CGTAACCTGCTGTCCGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGT
                                                                                                                                                                                                                           ATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACGTTACCGCT
                                                                                                                                                                                                                                                                       190 Arcaitrictricgalingagcagaaagaagaaagaaaagaagarcargingcrarr
                                                                                                                                                                                                                                                                                                                                ATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCCAAAGTTTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTAAGATGAAGGGTGATTATCATAGGTATCTTGCTGAGTTTAAGGCTGGTGCTGAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGACGCTGCTGAACACACCCTGGCTTACAAATCCGCTCAGGACATCGCTAACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGAAGCTGCTGAAAGCACTTTGGTTGCTTACAAGTCTGCTTCCGACATTGCCACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACTGGCTCCGACCCACCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTATCGCTGAGCTCGACACCCTGGGTGAAGATCCTACAAAGACTCCACCCTGATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     610 GCAATCGCTGAGTTAGATACATTGGGTGAGGAATCATACAAGGACAGTACACTGATTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             670 cadetriciradadacaárerenerereresaserresastares espacias de cadesas de cada 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 733 GAAATCAAAGAAGCTGCTGCTCCGAAACCGACCGAAGAA 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGATTAAGGAGGCATCAAAGCCCGATGGTGCCGAGTAA 768
                   GTTGAATTCATGGAAAAGTTTCCGCTGCTGTTGACGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 429, Application US/09938842A; Publication No. US20040009476A9; GENERAL INFORMATION:
                                                                    20
                                                                                                                     133
                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                               250
                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         613
                   73
                                                                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  730
                   8
                                                                                                                ò
                                                                                                                                                      g
                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
FILE OF INVENTION: Promoters for regulation FILE REFERENCE: 1360.001US1
CURRENT APPLICATION NUMBER: US/09/887,576
CURRENT FILING DATE: 2001-06-25
PRIOR REPLICATION NUMBER: US 60/213,848
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-02-29
NUMBER OF SEQ ID NOS: 875
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 789
LENGTH: 927
TYPE: DNA
                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                밁
                                                                                       8
                                                                                                                                   β
                                                                                                                                                               δ
                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 73.4
520; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Oryza sativa
-09-887-576-789
                                                                                                      612
                                                                                                                                                                                                             504
                                                                                                                                                                                                                                                                                 444
                                                                                                                                                                                                                                                                                                                     432
                                                                                                                                                                                                                                                                                                                                                         384
                                                                                                                                                                                                                                                                                                                                                                                                                              324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        204 CATCATATCATCCATTGAACAGAAGGAAGAGAGCCGTGGTAATGAGGATCGTTGCACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 132 ACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24 CCGTGAGGAGAATGTGTACATGGCTAAGCTTGCAGAGCAGGCCGAGAGGTATGAGGAGAT
                      GCAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACG
                                                                  GGCTATCTCAGAGCTGGACACTCTGAGTGAGGAATCCTACAAGGACAGCACTTTGATCAT
                                                                                               AGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCAT
                                                                                                                                                               CTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGA
                                                                                                                                                                                                             AGAGTTGCCCCCAACTCATCCTATCAGACTTGGGCTGGCCCTCAACTTCTCGGTGTTTTA
                                                                                                                                                                                                                                                                                   GAAGGATGCTGCTGAGAACACCATGGTGGCATACAAAGCCGCTCAGGATATTGCCCCTGGC
                                                                                                                                                                                                                                                                                                                 TAAAGACGCTGCTGAACACACCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGC
                                                                                                                                                                                                                                                                                                                                                                                        CAAGCTTCTTGACTCCCACCTTGTGCCTTCATCCACTGCTCCAGAGGTCCAAGGTCTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAACTGCTGGACTCCGGTCTGATCCCGGCTGCTGCTTCCGGTGACTCCAAAGTTTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCAAGGAATACAGGGGAAAGATTGAAACTGAGCTCTCCAAGATCTGTGATGGCATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACGTTACCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGCAACCTTCTATCAGTTGCTTACAAGAATGTTATTGGTGCTCGCCGTGCGTCATGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCGTTGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAAT
GCAGCTTCTGCGTGATAACCTGACGCTGTGGACTTCCGATATCTCGGAGG
                                                                                                                                                                                                                                           TGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTA
                                                                                                                                                                                                                                                                                                                                                         CCTCAAGATGAAAGGCGACTACTACAGGTACCTCGCAGAGTTTAAGACTGGAGCTGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTTGAGTTCATGGAGAAGGTTGCTAAGACAGTTGACTCTGAGGAGCTCACTGTTGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51.7%;
73.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for regulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 406; DB 9; ]
Pred. No. 2.2e-123;
0; Mismatches 190;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of plant expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
733
                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              °.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                      671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 191
                                                                                                                                                                           611
                                                                                                                                                                                                             563
                                                                                                                                                                                                                                                                                   503
                                                                                                                                                                                                                                                                                                                                                                                          431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83
                                                                    683
                                                                                                                                        623
                                                                                                                                                                                                                                                 551
                                                                                                                                                                                                                                                                                                                     491
                                                                                                                                                                                                                                                                                                                                                         443
                                                                                                                                                                                                                                                                                                                                                                                                                              383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    311
```

RESULT 13 US-10-412-699B-343

```
APPLICANT Mendel Biotechnology, Inc.
APPLICANT Mendel Biotechnology, Inc.
APPLICANT Heard, James
APPLICANT Heard, Jacqueline E.
APPLICANT Heard, Jacqueline E.
APPLICANT Rischmann, Jose Luis
APPLICANT Rischmann, Jose Luis
APPLICANT Rischmann, Jose Luis
APPLICANT Rischmann, Jose Luis
APPLICANT Pineda, Omalira
APPLICANT Heard, Omalira
APPLICANT Wu, Guo-Liang
APPLICANT Wu, Guo-Liang
APPLICANT Wu, Guo-Liang
APPLICANT Creelman, Robert A.
APPLICANT DuBell, Arnold N.
APPLICANT Ratcliffe, Oliver
APPLICANT Ratcliffe, Oliver
APPLICANT Ratcliffe, Oliver
APPLICANT Ratcliffe, Oliver
APPLICANT Winimoto, Roderick
APPLICANT Sherman, Bradley K.
TITLE OF INVENTION INTER: US/10/412,699B
CURRENT APPLICATION NUMBER: US/10/412,699B
CURRENT APPLICATION NUMBER: US/10/412,699B
CURRENT APPLICATION NUMBER: 09/394,519
PRIOR APPLICATION NUMBER: 09/394,519
PRIOR APPLICATION NUMBER: 09/394,519
PRIOR APPLICATION NUMBER: 09/394,519
PRIOR APPLICATION NUMBER: 09/393,330
PRIOR APPLICATION NUMBER: 09/333,330
PRIOR APPLICATION NUMBER: 09/533,332
PRIOR APPLICATION NUMBER: 09/533,332
PRIOR APPLICATION NUMBER: 09/533,392
PRIOR APPLICATION NUMBER: 09/533,394
PRIOR APPLICATION NUMBER: 09/533,648
PRIOR PILLING DATE: 2000-03-22
PRIOR APPLICATION PILLI
                                      Ş
                                                                                                      В
                                                                                                                                                                   Ş
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: US-10-412-699B-343
                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 2011
SOFTWARE: PatentIn version 3.2
SEQ ID NO 343
LENGTH: 768
TYPE: DNA
ORGANISM: Arabidopsis thaliana
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 343, Application US/10412699B Publication No. US20040045049A1 GENERAL INFORMATION:
                                                                                                                   70
                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                73
                                                                                                                                                                                                                                          10
                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                          GTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCGTTGAAGAA 132
                                                AGGGAAGAATGTTTACATGGCGAAATTAGCCGAACAAGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                             AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                    51.6%;
                                                                                                                                                                                                                                                                                                                                                       Score 405.4; DB 13;
Pred. No. 3.1e-123;
0; Mismatches 221;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                          ,
,
189
                                                                                                                   129
                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                                                                              0
```

```
Sequence 2349, Application US/10374780A
Publication No. US20040019927A1
GENERAL INFORMATION:
APPLICANT: Sherman, Bradley K
APPLICANT: Riechmann, Jose Luis
APPLICANT: Jiang, Cai-Zhong
                                                                      ; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-10-225-066A-789
                   3.1
NUMBER OF SEQ ID NOS: 1122
SOFTWARE: Patentin version
SEQ ID NO 789
LENGTH: 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-374-780A-2349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음 중 음
                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INCRAMINES
APPLICANT: Mendel Biotechnology, Inc.
APPLICANT: RATCLIFFE, Oliver
APPLICANT: RATCLIFFE, Oliver
APPLICANT: RECEMBANN, Jose Luis
APPLICANT: RECEMBANN, Dose Luis
APPLICANT: BLOBM, Juc J
APPLICANT: HERAD, Jacqueline E
APPLICANT: FIGRIM Marsha L
APPLICANT: FIGRIM Marsha L
APPLICANT: FIGRIM Marsha L
APPLICANT: PIGRIM Marsha L
APPLICANT: PIGRIM Nacita
APPLICANT: PINEDA, Omaira
APPLICANT: PILING DATE: 2002-08-09
FRIOR FILING DATE: 2001-04-18
FRIOR FILING DATE: 2001-04-18
FRIOR FILING DATE: 2001-12-05
FRIOR FILING DATE: 2001-12-05
FRIOR FILING DATE: 2001-12-05
FRIOR FILING DATE: 2001-12-05
FRIOR FILING DATE: 2001-12-10
FRIOR FILING DATE: 2001-12-10
FRIOR FILING DATE: 2001-12-05
FRIOR FILING DATE: 2001-12-05
FRIOR FILING DATE: 2001-12-05
FRIOR FILING DATE: 2001-12-05
FRIOR FILING DATE: 2001-12-10
FRIOR FILING DATE: 2001-12-10
FRIOR FILING DATE: 2001-12-10
FRIOR FILING DATE: 2001-12-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     670 CAGCITCITAGAGACAAICICACICICIGAGITTCAGAIATGACIGAAGCAGGAGAT 729
                       433 AAAGACGCTGCTGAACACCCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCT 492
                                                                                                                                                                                                                                                                                                                         430 AAAGAAGCTGAAAAGCACTTTGGTTGCTTACAAGTCTGCTTCCGACATTGCCACTGCT 489
                                                                                                                                                                                                                                                                                                                                                                 GAACTGGCTCCGACCCACCGGATCCGTCTGGGTCTGAACTTCTCCGTTTTCTAC 552
                                                                                                                                                                                                                                                                                                                                                                                                        549
                                                                                                                                                                                                                                                                                                                                                                                                                                         TACGAAATCCTGAACTCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAA 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       673 CAGCTGCTGCGTGACCACCTGACCTGTGGACCTCCGACATGCAGGACGACGCTGCTGAC 732
                                                                    253 ATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCGGGTATCTGCGACGGTATCCTG 312
                                                                                                                                            AAACTGCTGGACTCCCGGTGGTGCTGCTTCCGGTGACTCCAAAGTTTTCTAC 372
                                                                                                                                                                               310 AATGITCITGAAGCICAICITAITCCITCIGCITCACCAGCIGAATCTAAAGIGITTIAT 369
                                                                                                                                                                                                                   CTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            550 TATGAAATCCTCAACTCGCCTGATCGTGCTTGCAGCCTCGCAAAGCAGGCGTTTGATGAT 609
                                                                                                       250 Archagdarrachdagdagdarrahrachdagdrangdanahrandandardardarrad 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613 GCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAATCGCTGAGTTAGATACATTGGGTGAGGAATCATACAAGGACAGTACACTGATTATG
                                                                                                                                                                                                                                                                                                                                                                                           490 GAGTTAGCTCCTACTCACCCGATAAGGCTTGGTCTTGCACTCAACTTCTCTGTGTTTTAC
ATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACGATACCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                730 dAGATTAAGGAGGCATCAAAGCCCGATGGTGCCGAGTAA 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAATCAAAGAAGCTGCTGCTCCGAAACCGACCGAAGAA 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 789, Application US/10225066A Publication No. US20030226173A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-225-066A-789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  610
                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                                                 493
                                                                                                                                                                                                                                                                                                                                                                                                                                         553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               733
193
                                                                                                                                                                                                                  373
                                                                  à
                                                                                                 임
                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                             ద
                                                                                                                                            ò
                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                ò
```

```
672
                                                                                                                                                                                                                                                      132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             609
                                                                                                                                                                                                                                                                                                                       70 GTTGAATTCATGGAGAAGTTGCGAAAACTGTTGATGTTGAGGAACTTTCAGTTGAAGAG 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           250 ATCAAGGATTACAGAGGAGATTGAATCCGAGCTTAGCAAAATCTGTGATGGGATTTTG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313 AAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCCAAAGTTTTCTAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 370 ctraagargaagggrgarrarcaraggrarctrgcrgagrraaggcrggrgcrgaaagg 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                430 AAAGAAGCTGCTGAAAGCACTTTGGTTGCTTACAAGTCTGCTTCCGACATTGCCACTGCT 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72
                                                                                                                                                                                        69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        610 GCAATCGCTGAGTTAGATACATTGGGTGAGGAATCATACAAGGACAGTACACTGATTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         673 CAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACGCTGCTGCTGAC
                                                                                                                                                                                        10 AGGGAAGAATGTTTACATGCCGAATTAGCCGAACAAGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             190 Architrictricaringagcagaaadaadaagagcaaagggaacgaacarchigirgcrarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               550 TATGARATCCTCAACTCGCCTGATCGTCGCTTGCAGCCTCGCAAAGCAGGCGTTTTGATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTATCGCTGAGGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATG
                                                                                                                                                                                                                                                      73 GITGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACGGTTGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                             130 AGGAAICTICICTCTCTGTTGCTTACAAGAACGTGATTGGAGGAGGAGGAAGAGCTTCGTGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              490 dagriadcicciacicaccedaraadaciredricirecacicaacirererereriae
                                                                                                                                                                                                                                                                                                                                                                                        133 CGTAACCTGCTGTCCGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACCACGTTACCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGGACGGTATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    493 GAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTAC
                                                                                                                              13 AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCT
                                                             Gaps
                                                          .;
0
Length 768;
                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    733 GAAATCAAAGAAGCTGCTGCTCCGAAACCGAAGAA 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     768
   DB 13;
Query Match 51.6%; Score 405.4; DB 13; Best Local Similarity 70.9%; Pred. No. 3.1e-123; Matches 538; Conservative 0; Mismatches 221;
```

```
APPLICANT: FILEGA, UNITED AND POLYPEPTIDES IN PLANTS
FILE REFERENCE: MBI-0047 CIP
CURRENT APPLICATION NUMBER: US/10/374,780A
CURRENT APPLICATION NUMBER: US/837,944
PRIOR APPLICATION NUMBER: 09/837,944
PRIOR APPLICATION NUMBER: 09/837,944
PRIOR APPLICATION NUMBER: 09/837,944
PRIOR FILING DATE: 2001-04-18
PRIOR APPLICATION NUMBER: 09/934,455
PRIOR APPLICATION NUMBER: 09/934,455
PRIOR APPLICATION NUMBER: 09/934,455
PRIOR APPLICATION NUMBER: 09/934,455
PRIOR APPLICATION NUMBER: 09/336,049
PRIOR APPLICATION NUMBER: 60/336,049
PRIOR FILING DATE: 2001-08-22
PRIOR FILING DATE: 2001-11-19
PRIOR APPLICATION NUMBER: 10/171,468
PRIOR APPLICATIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                              Ş
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; FEATURE:
; OTHER INFORMATION: G536
US-10-374-780A-2349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 51.6%; Score 405.4; DB 16; Length 768; Best Local Similarity 70.9%; Pred. No. 3.1e-123; Matches 538; Conservative 0; Mismatches 221; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PPLICANT:
                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                  190
                                                                                                                                                                                                                                                                                                                                                                                                                                                             193 ATCATCTCCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGACGACGTTACCGCT 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     130 AGGAATCTTCTCTCTGTTGCTTACAAGAACGTGATTGGAGCGAGAAGAGCTTCGTGGAGA 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133 CGTAACCTGCTGTTCCGTTGCTTACAAAAACGTTATCGGTGCTCCGTCGTCGTGCTTCCTGGCGT 192
                                                                                                                                                                                                                              250 ATCAAGGATTACAGAGGAGATTGAATCCGAGCTTAGCAAAATCTGTGATGGGATTTTG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10 AGGGAAGAATGTTTACATGGCGAAATTAGCCGAACAAGCTGAACGTTACGAAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             70 GITGAATTCATGGAGAAAGTTGCGAAAACTGTTGATGTTGAGGAACTTTCAGTTGAAGAG 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 GTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCGTTGAAGAA 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Reuber, T. Lynne
Keddie, James
Broun, Pierre B
Pilgrim, Marsha L
Dubell III, Arnold T
CTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAAACCGGTCAGGAACGT 432
                                                                               AATGTTCTTGAAGCTCATCTTATTCCTTCTGCTTCACCAGCTGAATCTAAAGTGTTTTAT 369
                                                                                                                                                       AAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCCGGTGACTCCAAAGTTTTCTAC 372
                                                                                                                                                                                                                                                                                                                  <u>АГССӨТСААЛАСССТТССААЛАГССАААСССВААСТСТССССТАГСТСССВАСССТАГССТС</u> 312
                                                                                                                                                                                                                                                                                                                                                                                                  ATCATTTCTTCGATTGAGCAGAAAGAAGAGAGCAAAGGGAACGAAGATCATGTTGCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Heard, Jacqueline E
Haake, Volker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pineda, Omaira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oliver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69
                                                                                                                                                                                                                                                                                                                                                                                                  249
```

Search completed: June 7, 2004, 02:05:48
Job time: 540 secs

1299, Ap
2434, Ap
2434, Ap
5334, Ap
91, App1
118, App1
118, App
11

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                   00000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic
           number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No.
         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  is derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       greater
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             is the number of results predicted by chance to have ater than or equal to the score of the result being purived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hits satisfying chosen parameters:
      IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         June
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            682709 seqs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-507-166-38
786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Issued_Patents_NA:*

| Compact | Com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 atggcttccggcagagaaga.....aagaacagcaggctagctaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6, 2004, 22:12:54 ; Search time 92 Seconds
(without alignments)
4741.211 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
         GenCore version (c) 1993 - 2004
    US-08-97-918-38
US-08-266-451B-1
US-08-748-725-1
US-09-210-748-1
US-09-210-72B-1
US-09-210-72B-1
US-09-216-151-6
US-08-276-151-8
US-08-276-151-8
US-08-276-151-8
US-08-276-151-9
US-08-266-225D-7
US-09-313-294A-1821
US-09-313-294A-1821
US-09-313-294A-13749
US-09-313-294A-13749
US-09-313-294A-1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Compugen
Sequence 38, Appli
Sequence 1, Appli
Sequence 6, Appli
Sequence 91, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 7, Appli
Sequence 2935, Appli
Sequence 17, Appli
Sequence 117, Appli
Sequence 273, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 38, Application US/08997918
Patent No. 6077689
Patent No. 6077689
GENERAL INFORMATION:
APPLICANT: Snavely, Marshall D.
TITLE OF INVENTION: ENHANCED SOLUBILITY OF R
FILE REFERENCE: A-496
CUURRENT APPLICATION NUMBER: US/08/997,918
CUURRENT FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 59
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 38
LENGTH: 786
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
CHEED INFORMATION: Description of Artificial
                                                                                                                          밁
                                                                                                                                                                      δ
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                             뮍
                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1
US-08-997-918-38
                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-997-918-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Simi
Matches 786;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Description of Artificial OTHER INFORMATION: synthetic GF-14R gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 9 0 1 2 8 8 9 0 1 2 8 4 4 4 4 4 8 8 9 9 9 1 2 8 9 9 1 2 8 9 9 1 2 8 9 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 8 9 1 2 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                           121 ACCGTTGAAGAACGTAACCTGCTGCTGCTTGCTTACAAAAACGTTATCGGTGCTCGTCGT
                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
         AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAAACC
                                                                          GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCC
                                                                                                                                                                  CACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                     TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                              TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                      CACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                            GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                                                                                                                     GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                                                                                                                                                                 ACCGTTGAAGAACGTAACCTGCTGCTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCTTCCGGCAGAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                  GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCCGGTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4444
4444
4444
4444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44440888888888674477788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 786; DB 3; 100.0%; Pred. No. 2e-214;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-313-294A-1299
US-09-313-294A-2709
US-09-313-294A-5334
US-09-313-294A-5334
US-09-209-676-91
US-09-215-681-118
US-09-215-681-118
US-09-216-003A-118
US-09-216-003A-118
US-09-219-676-89
US-09-621-976-16792
US-09-621-976-16792
US-09-621-976-16792
US-09-621-976-16793
US-09-621-976-16793
US-09-621-976-16798
US-09-621-976-16788
US-09-621-976-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     D. SOLUBILITY OF RECOMBINANT PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Full length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
Sequence
Sequence
```

0 •

300

300 240

360 360 240

160 180

Length 845;

```
RESULT 3
US-08-748-725-1
                                                                       쉽
                                                                                                          슝
                                                                                                                                                                    à
                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                        8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                       ATCGCTAACGCTGAACTGGCTCCGACCCCACTCGGTCTGGGTCTGGGTCTGACTTC 540
                                                                                                                                                                                                                                                                                                                                                                           780
                                            541 TCCGTTTTCTACTACGAAATCCTGAACTCCCGGACCGTGCTTGCAACCTGGCTAAACAG 600
                                                                                                                                                                         541 TCGTTTTCTACTACTACAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGTAAAAAAAG 600
                                                                                                                                                                                                                    99
                                                                                                                                                                                                                                             601 GCTTTCGACGAAGCTATCGCTGAGCTCGACCCTGGGTGAAGAATCCTACAAAGACTCC 660
                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                               661 ACCCTGATCATGCAGCTGCGTGACAACCTGACCCTGTGGACCTCCGAACATGCAGGAC 720
                                                                                                                                                                                                                                                                                                                                           GGTCAGGAACGTAAAGACGCTGCTGAACACCCTGGCTGCTTACAAATCCGCTCAGGAC 480
                                                                                                                                                                                                                                                                                                                                                              GACGCTGATGAAATCAAAGAAGCTGCTGCTCCGAAACGACGAAGAAGAAGAAGAGCT
                                                                                                                                                                                                                 GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2

US-08-266-451B-1

Sequence 1, Application US/08266451B

Sequence 1, Application US/08266451B

Sequence 1, Application US/08266451B

Sequence 1, Application US/08266451B

TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
STREET: 225 Franklin Street
CITY: Boston

STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 0210-2804

COMPUTER: TEAP ES/A Model 502 or 55X

OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: HORDERFECT (Version 5.1)
CURRENT APPLICATION NUMBER: US/08/266,451B
FILING DATE: 3-JUNG-1994
CLASSIFACATION: NUMBER: 35,238
FREFERNCE/DOCKET NUMBER: 35,238
FREFERNCE/DOCKET NUMBER: 00786/219001
TELECOMMUNICATION NUMBER: 00786/219001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELES. 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 845
LYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                       AGCIAA 786
                                                                                                                                                                                                                                                                                                                                                                                                                                   781 AGCTAA 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TOPOLOGY:
US-08-266-451B-1
361
                                                                                       481
                                                                                                                     481
                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                       781
                          ઠે
                                                   q
                                                                                       8
                                                                                                                                         \stackrel{>}{\circ}
                                                                                                                                                                            g
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                            \dot{\delta}
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

```
299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          582
                                                                                                                                                                                           43 GACATTAGGCAGAGACCAGTATGTGTACATGGCGAAGCTCGCCGAGCAGCGGGAGCGTTA 102
                                                                                                                                                                                                                                                         63 CGAAGAAATGGTTGAATTCATGGAAAA---AGTTTCCGCTGCTGTTGACGGTGACGAACT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                    163 CACCGTIGAAGAGAGAATCICCTCTGTTGCTTACAAGAACGIGAICGGAICTCTACG 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    283 GCACGTGTCGCTTGTCAAGGATTACAGATCTAAAGTTGAGTCTGAGCTTTCTTCTTCTTTTT 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       403 TAAGGICITITACIIGAAGAGAGAGAGATAATCAICGGIACAIGGCIGAGIITAAGIC 462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       583 CTCAGTGTTCTACTATGAGATTCTCAATTCTTCAGACAAAGCTTGTAACATGGCCAAACA 642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    643 GGCTTTTGAGGAGGCCATAGCTGAGCTTGACACTCTGGGAGAGGAATCCTACAAAGACAG 702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        463 TGGTGATGAGGAAAAACTGCTGCTGCTGAAGATAACCATGCTCGCTTACAAAGCAGCTCAGGA
                                                                                                                                                                                                                                                                                                       120 GACCGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAACGTTATCGGTGCTCGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180 TECTTCCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240 CCACGITACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300 CGACGGTATCCTGAAACTGCTGGACTCCCGGTCTCCCGGCTGCTTCCGGTGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480 CATCGCTAACGCTGGCTCCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          523 TATCGCAGCTGCGGATATGGCACCTACTCCGATAAGGCTTGGTCTGGCCCTGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540 CTCCGTTTTCTACTACGAAATCCTGAACTCCCGGACCGTGCTTGCAACCTGGCTAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600 GGCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   703 CACTCTCATAATGCAGTTGCTGAGGGACAATTTAACCCTTTGGACCTCCGATATGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360 CAAAGITITCIACCIGAAAAIGAAAAGIGACIACCACCGGIACCIGGCIGAGITIAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420 CGGTCAGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660 CACCCTGATCATGCAGCTGCTGACGACCTGACCTGTGGACCTCCGACATGCAGGA
                                                                                                                            3 GGCTTCCGGCAGAGGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTA
                                                                 Gaps
                                                                 .,
m
Query Match
48.9%; Score 384; DB 1; Length 84
Best Local Similarity 71.8%; Pred. No. 7.4e-100;
Matches 517; Conservative 0; Mismatches 200; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/08748725

Sequence 1, Application US/08748725

Sequence 1, Application US/08748725

GENERAL INFORMATION: CALOUFER AFT PROTEINS AND USES
TITLE OF INVENTION: THEREOF
INVERSE OF INVENTION: THEREOF
INVERSE: 29
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson P.C.
STREET: Section
STREET: US-SF Franklin Street
CITY: Boston
STATE: Massachusetts
COMPUTRY: U.S.A.
ZIP: 02110-2804
COMPUTRY: IS-35*
MEDIUM TYPE: 3.5*
MEDIUM TYPE: 3.5*
DISKETTE IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                       В
                                밁
                                                              Ş
                                                                                        뮍
                                                                                                                     5
                                                                                                                                                        В
                                                                                                                                                                           Ś
                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-748-725-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 517; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/748,725
FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/266,451
FILING DATE: 23-JUNG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Lech, Karen F.
REGISTRATION NUMBER: 00/786/219002
TELECOMYUNICATION INFORMATION:
TELEPHONE: (617) 542-8906
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (617) 542-891
TELEX: 200154
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
TOPOLOGY: li
                                                                                             583
                                                                                                                                                                                       480
                                                                                                                                                                                                                    463
                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                               403
                                                                                                                                                                                                                                                                                                                                            343
                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acid
    CACCCTGATCATGCAGCTGCCTGACCAACCTGACCCTGTGGACCTCCGACATGCAGGA
                                                          GGCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTC
                                                                                                                                                                                                                                           CGGTCAGGAACGTAAAGACGCTGCTGAAACACACCCTGGCTGCTTACAAATCCGCTCAGGA
                                                                                                                                                                                                                                                                                 TAAGGTCTTTTACTTGAAGATGAAAGGTGATTATCATCGGTACATGGCTGAGTTTAAGTC
                                                                                                                                                                                                                                                                                                          CAAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                        GCACGTGTCGCTTGTCAAGGATTACAGATCTAAAGTTGAGTCTGAGCTTTCTTCTTGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                    CCACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACCGTTGAAGAGAAGCTCCTCTCTCTGTTGCTACAAGAACGTGATCGGATCTCTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACCGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAAGAGATGGTTCAATTCATGGAACAGCTCGTTACAGGCGCTACTCCAGCGGAAGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTA 62
                                                                                             ĊŢĊŖĠĬĠŢŢĊŢŖĊĬŖŢĠŖĠŖŢŢĊĬĊŖŖŢŢĊŢŢĊŖĠŖĊŖŖŖĠĊŢŢĠŢŖŖĊŖŢĠĠĊĊŖŖŖĊŖ
                                                                                                                    CTCCGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACA
                                                                                                                                                         TATCCCAGCTCCGATATCCCACCTACTCATCCGATAAGGCTTGGTCTGCCCCTGAATTT
                                                                                                                                                                                       CATCGCTAACGCTGAACTGGCTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTT
                                                                                                                                                                                                                    TGGTGATGAGAGGAAAACTGCTGCTGAAGATACCATGCTCGCTTACAAAGCAGCTCAGGA
                                                                                                                                                                                                                                                                                                                                            CGACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCCGGTGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAAGAAATGGTTGAATTCATGGAAAA----AGTTTCCGCTGCTGTTGACGGTGACGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACATTAGGCAGAGACCAGTATGTGTACATGGCGAAGCTCGCCGAGCAGGCGGAGCGTTA
                                  GGCTTTTGAGGAGGCCATAGCTGAGCTTGACACTCTGGGAGAGGAATCCTACAAAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 384; DB 2; ]
Pred. No. 7.4e-100;
0; Mismatches 200;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
    719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        102
                                                               659
                                                                                             642
                                                                                                                          599
                                                                                                                                                         582
                                                                                                                                                                                     539
                                                                                                                                                                                                                    522
                                                                                                                                                                                                                                                  479
                                                                                                                                                                                                                                                                                 462
                                                                                                                                                                                                                                                                                                                                            402
                                                                                                                                                                                                                                                                                                                                                                         359
                                                                                                                                                                                                                                                                                                                                                                                                        342
                                                                                                                                                                                                                                                                                                                                                                                                                                    299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     119
                                                                                                                                                                                                                                                                                                             419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: CDS
; LOCATION: (1)..(765)
US-09-167-206-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 4
US-09-167-206-7
                                               밁
                                                                           Ś
                                                                                                          맑
                                                                                                                                      Ş
                                                                                                                                                                       밁
                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 792
TYPE: DNA
ORGANISM: Homo s
FEATURE:
                  614
                                                                            554
                                                                                                            485
                                                                                                                                           494
                                                                                                                                                                        425
                                                                                                                                                                                                    434
                                                                                                                                                                                                                                   365
                                                                                                                                                                                                                                                                 374
                                                                                                                                                                                                                                                                                                305
                                                                                                                                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                                                                                           245
                                                                                                                                                                                                                                                                                                                                                                                      254
                                                                                                                                                                                                                                                                                                                                                                                                                      185
                                                                                                                                                                                                                                                                                                                                                                                                                                                     194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134
CTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATGC
                                                                                                                                       AACTGGCTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTACT
                                                                                                                                                                                                    AAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCTG
                                                                                                                                                                                                                                     ATÄAAÄTGAAÄGGGGÄCTÄCCÄCÄGGTÄTCTGGCÄGAÄTTTGCCÄCÄGGAÄÄCGÄCÄGGÄ
                                               ACGAAATTCTTAATTCCCCTGACCGTGCCTGCAGGTTGGCAAAAAGCAGCTTTTGATGATG
                                                                           ACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAAG
                                                                                                            AACTTCCACCAÁCGCATCCTATTCGCTTAGGTCTTGCTCTCAATTTTTCCGTATTCTACT
                                                                                                                                                                        AGGAGGCTGCGGAGAACAGCCTAGTGGCTTATAAAGCTGCTAGTGATATTGCAATGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
```

613 544 553

604

493 424

```
GENERAL INFORMATION:
APPLICANT: Nandabalan, Krishnan
APPLICANT: Schulz, Vincent P.
APPLICANT: APPLICATION UNISH: PROTEIN AND NIK1 PROTEIN COMPLEXES
FILE REFERENCE: 15966-521 NIK1 protein complexes
CURRENT APPLICATION UNUSER: US/09/187,206A
CURRENT FILING DATE: 1998-10-06
NUMBER OF SEQ ID NOS: 26
SOPTWARE: Patentin Ver. 2.0
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 7, Application US/09167206A ; Patent No. 6476193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 497; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125 GAAACCTCCTATCTGTTGCATATAAGAATGTGATTGGAGCTAGAAGAGCCTCCTGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 ттеалттеатевалаластттесестестеттвасествасевленаствассттваненае 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11 GAGAGGATCTGGTGTACCAGGCGAAGCTGGCCGAGCAGGCTGAGCGATACGACGAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 GAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               h 43.6%;
Similarity 67.8%;
TGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGTA 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACTCTCATAATGCAGTTGCTGAGGGACAATTTAACCCTTTGGACCTCCGATATGCAGGA
                                                                         ATGTACTGGACAAACACCTCATTCCAGCAGCTAACACTGGCGAGTCCAAGGTTTTCTATT
                                                                                                                      AACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCCAAAGTTTTTCTACC 373
                                                                                                                                                                                                                                                                        rccereaaraccerrarceaaarceaaacceaaccerrarcreceaceerarccrea 313
                                                                                                                                                                                                                                                                                                                                          TAATCAGCAGCATTGAACAGAAAGAAGAAAAACAAGGGAGGAGAAGACAAGCTAAAAATGA
                                                                                                                                                                                                                                                                                                                                                                                                         TCATCTCCTCCATCGAACAGAAAGAAGAATCCCCGTGGTAACGACGACCACGTTACCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGAGTCAATGAAGAAAGT-----AGCAGGGATGGATGTGGAGCTGACAGTTGAAGAAA 124
                                                                                                                                                                                                         TTCGGGAATATCGGCAAATGGTTGAGACTGAGCTAAAGTTAATCTGTTGACATTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 343; DB 4; Length 79
Pred. No. 3.5e-88;
0; Mismatches 230; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 792;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6
                                                                            364
                                                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           184
             433
                                                                                                                                                                                                             304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         70
                                                                                                                                                                                                                                                                                                                                       244
```

```
612
                                                                                    672
                                                                                                                           731
                                                                                                                                                                    732
                                                                                                                                                                                                         791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 67 TGAGGACATGGCGTCCTTCATGAAAGG------CGCCGTGGAGAAGGGCGGAGAGGACTCT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62
        553 TACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAA
                                             612 TACGAGATCGCCAACAGCCCGAGGAGGCCATCTCTCTCGCCAAGACCCACTTTCGACGAG
                                                                                                                           672 GCCATGGCTGATCTGCACACCCTCAGCGAGGACTCCTACAAAGACAGCACCCTCATCATG
                                                                                                                                                                  673 CAGCTGCTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACGCTGCTGAC
                                                                                                                                                                                            63 CGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 eeccareeaeaeaeccaercrearccaeaaeeccaecreecaeaecaeeceaaeccaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 GECTICCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                               ,
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USAR
ZIP: 92101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
CORPUTER: IBM PC compatible
CORREATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/887,0728
FILING DATE: 20-MAY-1992
CLASSIFICATION: 435
ATTORNEY/AGENTION: 435
ATTORNEY/AGENTION: NUMBER: 32,617
REGISTRATION NUMBER: 32,617
REFERENCE/DOCKET NUMBER: 31,617
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
35.6%; Score 279.6; DB 1;
Best Local Similarity 62.4%; Pred. No. 4.9e-70;
Matches 457; Conservative 0; Mismatches 269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1245 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                       GA 793
                                                                                                                                                                                                                                                733 GA 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-07-887-072B-1
                                                                                      613
                                                                                                                                                                                                                                                                                         792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                  g
                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                  ઠ
                                                                                                                                                           \delta
                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              252 GIGCIGICCAGIAITGAGCAGAAAGCAAGGAGGAGGAGGAGAAGAGGGCCCGAG 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCAGGAACGT 432
605 CAATTGCAGAACTGGATACGCTGAGTGAAGAAAGCTATAAGGACTCTACACTTATCATGC 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGGAACTGACGGTTGAAGAA 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    138 GCAGCCTTCATGAAAGG-----CGCCGTGGAGAAAGGGCGAGGAGCTCTCCTGCGAAGAG 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           133 CGTAACCTGCTGTCCGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGT 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ceaaaccrecrecrearaeccraraaaacereereereeceeccaaeeecrecreeree 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193 ATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGACGATTACCGCT 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  312 GTGCGTGAGTACCGGGAGAAGGTGGAGACTGAGCTCCAGGGCGTGTGCGACACCGTGCTG 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  372 GGCCTGCTGGACAGCCACCTCATCAAGGAGGCCGGGACGCCGAGAGGCGGGGTCTTCTAC 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CIGAAGATGAAGGGTGACTACCGCTACCTGGCCGAGGTGGCCACCGGTGACGAAG 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCT 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGATGCCGCCCACCAACCCCATCCGCCTGGGCCTGGCCCTGGAACTTTTCCGTCTTCCAC
                                                                                665 AGTIGITACGICATAATCIGACACIATGGACTICAGACAIGCAGGGTGACGGIGAAGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13 AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    78 AGAGCCAGTCTGATCCAGAAGGCCAAGCTGGCAGAGCAGGCCGAACGCTATGAGGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313 AAACTGCTGGACTCCCGGTCTGATCCCGGCTGCTTCCGGTGACTCCCAAAGTTTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCGCATCATTGACTCAGCCCGGTCAGCCTACCAGGAGGCCCATGGACATCAGCAAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 35.7%; Score 280.8; DB 4; Length 1320; Best Local Similarity 62.9%; Pred. No. 2.3e-70; Matches 454; Conservative 0; Mismatches 262; Indels 6;
                                                                                                                                                                                                                                                                                                                                                                                        CELL
                                                                                                                                                                                                                                                  Sequence 1, Application US/09210748A
; Sequence 1, Application US/09210748A
; Sequence 1, Application US/09210748A
; Patent No. 6335156
; GENERAL INFORMATION:
APPLICANT: Hermeking, Heiko
APPLICANT: Vogelstein, Bert
APPLICANT: Kinzler, Kenneth
TITLE OF INVENTION: 14-3-3 SIGMA ARREST THE CEL
FILE REFERENCE: 1107.77810
CURRENT APPLICATION NUMBER: US/09/210,748A
CURRENT FILING DATE: 1998-12-15
; RRICR APPLICANION NUMBER: 60/069,416
; RICR APPLICANION NUMBER: 60/069,416
; NUMBER OF SEQ ID NOS: 18
; SEQ ID NO 1.
                                                                                                                       734 AAATCAAAGAAGC 746
                                                                                                                                                              725 ÁGAATAAAGAAGC 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
CRGANISM: Homo sapiens
US-09-210-748A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                         674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       433
ద
                                      \overset{\circ}{\circ}
                                                                         g
                                                                                                                    δ
                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

```
В
                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Praead Ph.D., Gaddamanugu L.
APPLICANT: Cooper M.D., Herbert L.
TITLE OF INVENTION: EPITHELIAL CELL SPEC:
TITLE OF INVENTION: MARKER
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Be.
STREET: 501 W. Broadway, Suite 1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 7
US-08-466-444-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맖
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/08466444
Patent No. 5776676
COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOPTWARE: PATENTIN PC-DOS/MS-DOS

SOPTWARE: PATENTIN DATA:

APPLICATION NUMBER: US/08/466,444

FILING DATE: 06-JUN-1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/887,072
                                                                                                                                                                                                                                                                                                 STREET: 50.
STREET: 50.
CITY: San Diego
CTATE: California
"TATE: TICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTGATCATGCAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCTAACGCTGAACTGGCTCCGACCCCAACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCTTCCACCTGAAGATGAAGGGTGACTACTACCGCTACCTGGCCGAGGTGGCCACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAAACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGGCCCGAGGTGCGTGAGTACCGGGAGAAGGTGGAGACTGAGCTCCAGGGCGTGTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGGGGGGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCTGCTGACGA 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTCGACGAGGCCATGGCTGATCTGCACACCCTCAGCGAGGACTCCTACAAAGACAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCAAGAAGGAGATGCCGCCCACCAACCCCATCCGCCTGGGCCCTGGAACTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGACGACAAGAAGCGCATCATTGACTCAGCCCGGTCAGCCTACCAGGAGGCCATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACCGTGCTGGGCCTGCTGGACAGCCACCTCATCAAGGAGGCCGGGGACGCCGAGAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ceerarccreaaacrecreeacreccercrearccceecrecrecrecereacrecaa 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCCTGGAGGGTGCTGTCCAGTATTGAGCAGAAAAGCAACGAGGAGGAGGACTCGGAGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTCATCATGCAGCTGCTGCGAGACAACCTGACACTGTGGACGGCCGACAACGCCGGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rtrogacgaagotarogotgagotogacacotggggggaagaarootacaaagactocac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTCTTCCACTACGAGATCGCCAACAGCCCCGAGGAGGCCATCTCTCTGGCCAAGACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ттостевоститовтогостоскатовка скажа в в представовности при пределением представованием предста
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCGAAGAGCGAAACCTGCTCTCAGTAGCCTATAAGAACGTGGTGGGCGGCCAGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       certeaaaeaacetaacetecterecettectacaaaaacettarceetectectec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaddamanugu L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CELL SPECIFIC
                                                                                                                                                                                                                                                                                                                                                                                                           Bear
                                                                                                                                                       #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DIFFERENTIATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                  Ś
                                                                                                                                                                            문
                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-466-444-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 20-MAY-1992
ATTORNEY/AGENT INFORMATION:
NAME: Kirkpatrick Ph.D., Anita M.
REGISTRATION NUMBER: 32,617
REFERENCE/DOCKET NUMBER: NH-021.021A
TELECOMUNICATION INFORMATION:
TELEPHONE: (619) 235-0850
TELEPAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1245 base pairs
TYPE: nucleic acid
STRANDENNESS: single
TOPOLOGY: linear
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linea
MOLECULE TYPE: DN
HYPOTHETICAL: NO
ANTI-SENSE: NO
                               723
                                                                               661
                                                                                                                                                                               601
                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                           543
                                                                                                                            663
                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            457;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          67 TGAGGACATGGCAGCCTTCATGAAAGG------CGCCGTGGAGAAGGGCGAGGAGCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
     CGCTGCTGACGA
                                                                                  CCTCATCATGCAGCTGCCGAGACAACCTGACACTGTGGACGGCCGACAACGCCGGGGA
                                                                                                                                                                               TTTCGACGAGGCCATGGCTGATCTGCACACCCCTCAGCGACGACTCCTACAAAGACAGCAC
                                                                                                                                                                                                                                                                                                                           cerrrrrracraceaaarccreaacreceeaaccerecrrecaaccreecraaacaeec
                                                                                                                                                                                                                                                                                                                                                                                CAGCAAGAAGGAGATGCCGCCCACCAACCCCATCCGCCTGGGCCCTGAACTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                        CGCTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGGTCTGAACTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGACGACAAGAAGCGCATCATTGACTCAGCCCGGTCAGCCTACCAGGAGGCCATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTCTTCCACCTGAAGATGAAGGGTGACTACTACCGCTACCTGGCCGAGGTGGCCACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAAACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGGCCCGAGGTGCGTGAGTACCGGGAGAAGGTGGAGACTGAGCTCCAGGGCGTGTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCCTGGAGGGTGCTGCCAGTATTGAGCAGAAAAGCAACGAGGAGGGCTCGGAGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCCTGGCGTATCATCTCCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAAGAAATGGTTGAATTCATGGAAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCATGGAGAGAGCCAGTCTGATCCAGAAGGCCAAGCTGGCAGAGCAGGCCGAACGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTA
                                                                                                                          CCTGATCATGCAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGA
                                                                                                                                                                                                                              TTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCAC
                                                                                                                                                                                                                                                                                 CGTCTTCCACTACGAGATCGCCAACAGCCCCGAGGAGGCCATCTCTCTGGCCAAGACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACCGTGCTGGGCCTGGTGGACAGCCACCTCATCAAGGAGGCCGGGGACGCCGAGAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCGAAGAGCGAAACCTGCTCTCAGTAGCCTATAAGAACGTGGTGGGCGGCCAGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 35.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 279.6; DB 1;
Pred. No. 4.9e-70;
0; Mismatches 269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1245;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                 602
                                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            66
                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
```

μ,

셤

```
379 TCTCTTTTGGAAAGTTCTTGATCCCCAATGCTTCACAAGCAGAGGCAAAGTCTTCTAT 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPOTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOGTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/276,151

FILING DATE: 14-JUL-1994

CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:

NAME: TOSCOHIA, PD., TANOCHY E

REGISTRATION NUMBER: 36,700

REFERENCE/DOCKET NUMBER: ONYX-005/00US

TELECOMMUNICATION NUMBER: 36,700

TELECOMMUNICATION NUMBER: 36,700

TELEPRAX: (415) 843-5481

TELEPRAX: (415) 843-5481

INFORMATION FOR SEQ ID NO: 8:

SEQUENCE CHRACTERISTICS:

LENGTH: 2834 base pairs

WODENCE CHRACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: CDNA to mRNA HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         733 GAAATCAAAGAAG 745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      799 GCAGGAGAAGGAG 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid sTRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HYPOTHETICAL: NORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS-08-276-151-8
                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                             В
                                                                                                                                     ઠ
                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91 AAAAATGAGCTGGTTCAGAAGGCCAAACTGGCCGAGCAGGCTGAGCGATATGATGACATG 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73 GITGAAITCAIGGAAAAGITTCCGCTGCTGTTGACGCTGACGAACTGACGTTGAAGAA 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151 GCAGCCTGCATGAAG-----TCTGTAACTGAGGAGGAGCTGAATTATCCAATGAGGAG 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      313 AAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCCCAAAGTTTTCTAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133 CGTAACCTGCTGTCCGTTGCTTACAAAACGTTATCGGTGCTCGTCGTGCTTCCTGGCGT 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            205 AGGAATCTTCTCTCAGTTGCTTATAAAATGTTGTAGGAGCCCGTAGGTCATCTTGGAGG 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         193 ATCATCTCCTCCATCGAACAGAAAGAATCCCGTGGTAACGACGACGACGTTACCGCT 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253 ATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTG 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321 --TCGAGAATACAGAGAGAAAATTGAGACGAAGCTAAGAGATATCTGCAATGATGTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Gross, Richard W.
APPLICANT: Gross, Richard W.
TITLE OF INVENTION: No. 5279957el Human Phospholipase A2 Polypeptide
TITLE OF INVENTION: And Methods Of Use
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & No. 5279957ris
STREET: 1 Liberty Place, 46th Floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       34.3%; Score 269.8; DB 1; Length 853; 62.6%; Pred. No. 2.6e-67; tive 0; Mismatches 262; Indels 12;
                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: ISM PC compatible
COMPUTER: ISM PC compatible
COMPUTER: ISM PC compatible
COMPACE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/876,284
FILING DATE: 19920430
CLASSIFTCATION: 435
ATTORNEY/ACENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY AGENT INPORMATION:
NAME: Hohenschutz, Liza D.
REGISTATION UNDRER: 33,712
REFERENCE/DOCKET NUMBER: SPNX-0109
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
TELEPHONE: (215) 568-3439
INFORMATION FOR SEQ.ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                 RESULT 8
US-07-876-284-1
; Sequence 1, Application US/07876284
; Patent No. 5279957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: CDNA to MRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  853 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 62.6
Matches 459; Conservative
721 AGAGGGGGGGA 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 853 base por TYPE: NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85..822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: NUCLEIG
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; NAME/KEY:
; LOCATION:
US-07-876-284-1
                                                                                                                                                                                                                                                                                                                                                                            STATE: P.
```

qq

ò

8 g à

g

g

Db

ਨੇ

```
612
                                                                                                                                                                                                            433 AAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAACGCT 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     559 GAAATGCAACCAACATCCTATCAGACTGGGTCTGGCCCTTAACTTCTCTGTGTTCTAT 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              619 TATGAGATTCTGAACTCCCCAGAGAAAGCCTGCTCTTGCAAAGACAGGCTTTTGATGAA 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            679 GCCATTGCTGAACTTGATACATTAAGTGAAGAGTCATACAAAGACAGCACGCTAATAATG 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        673 CAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACGCTGCTGAC 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         739 CAATTACTGAGAGACAACTTGACATTGTGGACATCGGATACCCAAGGAGAGGAGGCGAAGCTGAA 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               613 GCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATG
439 TIGAAAAIGAAAGGAGATTACTACCGTTACTTGGCTGAGGTTGCCGCTGGTGACAAG
                                                                                                                                                                                                                                                                                                                                                                                                             499 AAAGGGATTGTCGATCAGTCACAACAAGCATACCAAGAAGCTTTTGAAATCAGCAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493 GAACTGGGTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  553 TACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 8, Application US/08276151
| Patent No. 559719
| GENERAL INFORMATION:
| APPLICANT: Freed, Ellen
| APPLICANT: Ruggieri, Rosamaria
| TITLE OF INVENTION: Interaction of raf-1 and 14-3-3 Proteins
| NUMBER OF SEQUENCES: | CORRESPONDENCE ADDRESS: | CORRESPONDENCE ADDRESS: | STREET: Five Palo Alto | STREET: CA | STREET: CA | STREET: CA | COUNTRY: USA | STREET: CA |
```

ALto

Square

```
; FEATURE:
; NAME/KEY:
; LOCATION:
US-08-276-151-8
                                                                                            RESULT 10
US-08-276-151-6
; Sequence 6, Application US/08276151
; Patent No. 5597719
; Patent No. 5597719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δõ
                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
            GENERAL INFORMATION:
APPLICANT: Freed, Ellen
APPLICANT: Ruggieri, Rosamaria
TITLE OF INVENTION: Interaction
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
 ADDRESSEE:
                                                                                                                                                                                                                                                                                                                    679
                                                                                                                                                                                                                                                                                                                                                                              619
                                                                                                                                                                                                                                                                                                                                                                                                                                         559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321 --TCGAGAÁTACAGAGAGAAAÁTTGAGACGGÁGCTAAGAGATÁTCTGCAÁTGATGTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         193 АТСАТСТССТССАТСВААСАВААЛВААВВАТСССВТВЕТААСВАСВАСВАСВТАССВСТ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             133 CGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGTCGTGCTTCCTGGCGT 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   151 GCAGCCTGCATGAAG-----TCTGTAACTGAGCAAGGAGCTGAATTATCCAATGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        459;
                                                                                                                                                                                              799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 AGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAATGAGCTGGTTCAGAAGGCCAAACTGGCCGAGCAGGCTGAGCGATATGATGACATG
                                                                                                                                                                                                                                                                                                                                      GCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACCCTGATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGACGCTGCTGAACACCCTGGCTGCTTACAAATCCGCTCAGGACATCGCTAAdGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCCGGTCAGGAACGT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTCTTTTGGAAAAGTTCTTGATCCCCAATGCTTCACAAGCAGAGAGCAAAGTCTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCCAAAGTTTTCTAC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTGAATTCATGGAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCGTTGAAGAA
                                                                                                                                                                                              GCAGGAGAAGGAG
                                                                                                                                                                                                                         GAAATCAAAGAAG 745
                                                                                                                                                                                                                                                        CAATTACTGAGAGACAACTTGACATTGTGGACATCGGATACCCAAGGAGGACGAAGCTGAA
                                                                                                                                                                                                                                                                                    CAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACGCTGCTGAC 732
                                                                                                                                                                                                                                                                                                                   GCCATTGCTGAACTTGATACATTAAGTGAAGAGTCATACAAAGACAGCACGCTAATAATG
                                                                                                                                                                                                                                                                                                                                                                              TATGAGATTCTGAACTCCCCAGAGAAAGCCTGCTCTTTGCAAAGACAGCTTTTGATGAA
                                                                                                                                                                                                                                                                                                                                                                                                         TACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTTTCGACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAATGCAACCAACATCCTATCAGACTGGGTCTGGCCCTTAACTTCTCTGTGTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTGGCTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCGTTTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGGGATTGTCGATCAGTCACAACAAGCATACCAAGAAGCTTTTGAAATCAGCAAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGAAAATGAAAGGAGATTACTACCGTTACTTGGCTGAGGTTGCCGCTGGTGATGACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDS
85..822
Cooley Godward et al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62.6%;
                                                                                                                                                                                              811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 269.8; DB 1;
Pred. No. 4.4e-67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                            of raf-1 and 14-3-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 2834;
                                            Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              150
                                                                                                                                                                                                                                                                                                                                                                                                           612
                                                                                                                                                                                                                                                                                                                                                                                                                                         618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     204
                                                                                                                                                                                                                                                                                                                                                672
                                                                                                                                                                                                                                                                                                                                                                              678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           264
                                                                                                                                                                                                                                                                                                                   738
                              밁
                                                        Ś
                                                                                                                Ś
                                                                                                                                                 밁
                                                                                                                                                                         Ś
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
Ś
                                                                                      밁
```

```
US-08-276-151-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local
Matches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (415) 857-066: INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 1213 base pair:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: CDN
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Homo s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: TOTCHIA, Ph.D., Timothy E
REGISTRATION NUMBER: 36,700
REFERENCE/DOCKET NUMBER: 0NYX-005/00US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 843-5481
TELEPHONE: (415) 847-0663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/276,151
FILING DATE: 14-JUL-1994
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: Five Palo
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          455;
                                                                                                                                                                                                                                                                                     547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
781
                                  421
                                                                    721
                                                                                                      361
                                                                                                                                          661
                                                                                                                                                                           301
                                                                                                                                                                                                               607
                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                           487
                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                433 TATGATGATATGGCTGCAGCCATGAAGGCAGTCACAGAAC-----AGGGGCATGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                       GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ç
                                                                                           AAAGTTTTCTACCTGAAAATGAAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC 420
                                                                                                                                                                                                                                                                                                                                                                                  ACCGTTGAAGAACGTAACCTGCTGCTGCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGT
                                  GGTCAGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGAC 480
                                                                                                                                          AATGATGTTCTGGAGCTGTTGGACAAATATCTTATTCCCAATGCTACACAACCAGAAAGT 720
                                                                                                                                                                           GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTTCCGGTGACTCC
                                                                                                                                                                                                               CAGATGG-----GCAAAGAGTACCGTGAGAAGATAGAGGCAGAACTGCAGGACATCTGC
                                                                                                                                                                                                                                               CACGTTACCGCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGC
                                                                                                                                                                                                                                                                                                                                                           TACGAAGAAATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGACAATGGATAAAAGTGAGCTGGTACAGAAAGCCAAACTCGCTGAGCAGGCTGAGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
GGAGACAACAAACAAACCACTGTGTCGAACTCCCAGCAGGCTTACCAGGAAGCATTTGAA
                                                                      AAGGTGTTCTACTTGAAAATGAAAGGAGATTATTTTAGGTATCTTTCTGAAGTGGCATCT
                                                                                                                                                                                                                                                                                   TCTTCCTGGCGTGTCATCTCCAGCÁTTGAGCAGAAAACAGAGAGGAATGAGAAGAAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA to mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ο,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 263.4; DB Pred. No. 2e-65; 0; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1213;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12;
                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                           546
                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                  486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
840
                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                       606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
```

481

ATCGCTAACGCTGAACTGGCTCCGACCCCGATCCGTCTGGGTCTGGCTCTGAACTTC

```
1034 ACTCTGATCATGCAGTTACTTAGGSACAATCTCACTCTGTGGACATCGGAAAACCAGGGA 1093
                             361 AAAGTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                     974 GCATTIGATGAAGCAATIGCIGAATIGGATACGCIGAATGAAGAAGACTCTTATAAAGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661 ACCCTGATCATGCAGCTGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGAC
                                                                                                                     GGTCAGGAACGTAAAGACGCTGCTGAACACACCCCTGGCTTACAAATCCGCTCAGGAC
                                                                                                                                                               794 GGAGACAACAACAACCACTGTGTGGAACTCCCAGCAGGCTTACCAGGAAGCATTGAA
                                                                                                                                                                                                                                                         854 ATTAGTAAGAAAGAAATGCAGCCTACACACCCAATTCGTCTTGGTCTGGCACTAAATTTC
                                                                                                                                                                                                                                                                                                        TOCGITITICIACIACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAG
                                                                                                                                                                                                                                                                                                                                                  rcaercrirraciardaearrcraaacrerereaaaagecrieragecraegeaaaage
                                                                                                                                                                                                                                                                                                                                                                                                601 GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                             ATCGCTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3, Application US/07887072B
Patent No. 5424191
GENERAL INFORMATION:
APPLICANT: Prasad Ph.D., Gaddamanugu L.
APPLICANT: Cooper M.D., Herbert L.
TITLE OF INVENTION: MARKER
NUMBER OF SEQUENCES: 5
CORRESPONDENCES 5
CORRESPONDENCES ADDRESS: Knobbe, Martens, Olson & Bear
STREET: 501 W. Broadway, Suite 1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STAIE: CONTRY: USA
ZIE: 92101
COMPUTER READABLE FORM:
REBLUM TYPE: Rloppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENT: Release #1.0, Version #1.25
SUFWARE: 120-MX-1992
FILING DATE: 20-MX-1992
CLASSIFICATION NUMBER: US/07/887,072B
FILING DATE: 20-MX-1992
ATTORNEY/AGENT INFORMATION:
NAME: Kirkpatrick Ph.D., Anita M.
REFISTENCE/DOCKET NUMBER: 32.617
REFERENCE/DOCKET NUMBER: NIH021.021A
TELECOMMUNICATION NUMBER: NIH021.021A
TELECOMMUNICATION NUMBER: (619) 235-8550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (619) 235-0350
INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS:
LENGTH: 1696 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1094 GACGAAGGAGACG 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721 GACGCTGCTGACG 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: San Diego
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HYPOTHETICAL: N
HYPOTHETICAL: NO
HYPOTHETICAL: NO
HYPOTHETICAL: NO
HYPOTHETICAL: NO
US-07-887-072B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SULT 12
-07-887-072B-3
                                                                                                                                                                                                                                                                                                        541
                                                                                                                   421
                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                  914
                                                                                                                   ઠે
                                                                                                                                                  g
                                                                                                                                                                                               ð
                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                         S
P
                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                      1021 Acticidaticardecagitracitrasesaciaricicacticidesecarcesaaaaccasesa 1080
                                                                                                                                                                 099
600
                                                                                                                   960
                                                                                                                                                                                                                                                    661 ACCCTGATCATGCAGCTGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGAC 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386 Ardachardandandadoriderachedandechanderecerendaderidadee 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 TACGAAGAAATGGTTGAATTCATGGAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      446 TATGATGATATGGCTGCAGCCATGAAGGCAGTCACAGAAC-----AGGGGCATGAACTC 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 ACCGTTGAAGAACGTAACCTGCTGTCCGTTGCTTACAAAACGTTATCGGTGCTCGTTGT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         560 retrecrescererearerecesearresses sas sas sas sas sas sas sas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 CACGITACCGCTATCCGTGAATACCGTTCCAAATCGAAACCGAACTGTCCGGTATCTGC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTTCCTGGCGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCGTGGTAACGACGAC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   620 cAGATGG-----GCAAAGAGTACCGTGAGATAGAGGCAGAACTGCAGGACATCTGC 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 GACGGTATCCTGAAACTGCTGGACTCCCGTCTGATCCCGGCTGCTGCTTCCGGTGACTCC 360
                                                                                             TCCGTTTTCTACTACGAAATCCTGAACTCCCGGACCGTGCTTGCAACCTGGTAACAG
                                                                                                                                                            601 GCTTTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ATGGCTTCCGGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              674 AATGATGTTCTGGAGCTGTTGGACAAATATCTTATTCCCAATGCTACACAACCAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 4; Length 3268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 91, Application US/09566921

Sequence 91, Application US/09566921

Setent No. 668288

GENERAL INFORMATION:

APPLICANT: Cring, Jeanne F.

APPLICANT: Tingley, Debora W.

APPLICANT: Tingley, Debora W.

APPLICANT: GENERAS, Carla M.

TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE

FILE REFERENCE: PA.0024 US

CURRENT APPLICATION NUMBER: US/09/566,921

CURRENT FILING DATE: 2000-05-05

NUMBER OF SEQ ID NOS: 138

SOFTWARE: PERL PROGram

SEQ ID NO 91

LENGTH: 3268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 33.5%; Score 263.4; DB 4; Length Best Local Similarity 62.1%; Pred. No. 3.1e-65; Matches 455; Conservative 0; Mismatches 266; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. 6682888 412068.12
NAME/KEY: ONBUTE
LOCATION: 62, 115-180
OTHER INFORMATION: a, t, c, g, or other
                                                                                                                                                                                                                                                                                                                                                                                         1081 GACGAAGGAGACG 1093
                                                                                                                                                                                                                                                                                                                                               721 GACGCTGCTGACG 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 11
US-09-566-921-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-566-921-91
                                                                    541
                                                                                                    g
                                                                                                                                           ò
                                                                                                                                                                                               g
                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                         d
                                                                  à
                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \stackrel{>}{\circ}
```

```
RESULT 13
US-08-466-444-3
                                                                                                                           Sequence 3, Application US/08466444

Patent No. 5776676

GENERAL INFORMATION:
APPLICANT: Prasad Ph.D., Gaddamanugu L.
APPLICANT: Cooper M.D., Herbert L.
TIFLE OF INVENTION: BPITHELIAL CELL SPECIFIC DIFFERENTIATION
TIFLE OF INVENTION: MARKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
STREET: 50.
STREET: 50.
CITY: San Diego
CTATE: California
                                                   NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESSE: Knobbe, Martens, Olson & Bear ADDRESSEE: Knobbe, Martens, Olson & Bear STREET: 501 W. Broadway, Suite 1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              470;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 GGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAA
                                                                                                                                                                                                                                                                                                                                                                        GCTGCTGACGAAATCAAAGAAGCTGCTGCTCCGAAACCGACC 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGATCATGCAGCTGCTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCGACGACGCCATAGCCGAGCTGGACACACTAAACGAGGATTCCTATAAGGACTCCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTAACGCTGAACTGGCTCCGACCCACCCGATCCGGTCTGGGGTCTGGGCTCTGAACTTCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGAACGTAAAGACGCTGCTGAACACACCTGGCTGCTTACAAATCCGCTCAGGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGAAACTGCTGGACTCCCGTCTGATC----CCGGCTGCTGCTTCCGGT--GACTCCAAA 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGGTCATCAGCAGCATCGAGCAGAAGACCATGGCTGATGGGAATGAGAAGAAGCTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGTATCATCTCCTCCATCGAACAGAAGAAGAATCCCCTGGTAACGACGACCACGTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTGCTGCTGCTTCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCTCCGCCATGAA-----GGCGGTGACTGAGCTCAATGAACCTCTCTCCAACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGTTGAATTCATGGAAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACCGTTGAA 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACCGCGAGCAGCTGCTGCAGCGGGCGGGCGGCTGGCCGAGCAGCGGAGCGCTACGACGAC 231
                                                                                                                                                                                                                                                                                                                                        GAAGCCGGAGAAGGCAACTGAGCGCCTTGGCCCGCCCCCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                CTCATCATGCAGCTGCTGCGAGACAACCTCACCCTCTGGACGAGCGACCAGCAGGACGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCAAGGAGCACACGCCACACCCCCATCCGGCTGGGCCTGGCCCTCAACTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCTTCTACCTGAAGATGAAGGGGCGACTACTACCGCTACCTGGCCGAGGTGGCTTCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGCGCTGCTGGACAAGTTCCTCATCAAGAACTGCAATGACTTCCAGTACGAGAGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGGTGAAGGCCTACCGGGAGAAGATTGAGAAGGAGCTGGAGACGGTGTGCAACGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             33.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 260; DB 1; Length 16; Pred. No. 2.2e-64; O; Mismatches 280; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1696;
                                                                                                                                                                                                                                                                                                                                      927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          405
                                                                                                                                                                                                                                                                                                                                                                                                                885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                   밁
                                                                                 Ş
                                                                                                                       В
                                                                                                                                                           Ś
                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-466-444-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
ZIP: 92101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTLY MC-DOS #1.0, V
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/466
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION DATA: 07/887
FILING DATE: 20-MAY-1992
ATTORNEY AGENT INFORMATION: NAME: KI*Kpatrick Ph.D., Anit. REGISTRATION NUMBER: 32,617
REFERENCE/DOCKET NUMBER: NIHO:
TELECOMMUNICATION INFORMATION: TELEPHONE: (619) 235-0550
TELEPAX: (619) 235-0176
TELEPAX: (619) 235-0176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (619) 235-017/
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: STRANDEDNESS: SI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 1696 base | TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                   310
                                                                                                                                                                                                                                                                                                                                                                                                                                  346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130
                                                   646
                                                                                       484
                                                                                                                             586
                                                                                                                                                                   424
                                                                                                                                                                                                       526
                                                                                                                                                                                                                                           364
                                                                                                                                                                                                                                                                               466
                                                                                                                                                                                                                                                                                                                                                        406
                                                                                                                                                                                                                                                                                                                                                                                            250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    232 ATGGCCTCCGCCATGAA-----GGCGGTGACTGAGCTCAATGAACCTCTCTCCCAACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     470;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10 GGCAGAGAACTGGTTTACATGGCTAGACTGGCTGAACAGGCTGAACGTTACGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACCGCGAGCAGCTGCTGCAGCGGGCGGCGGCTGGCCGAGCAGGCGGAGCGCTACGACGAC
                                                                                                                                                                                                                                                                                                                                                        AAGGTGAAGGCCTACCGGGAGAAGATTGAGAAGGAGCTGGAGACGGTGTGCAACGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTATCATCTCCTCCATCGAACAGAAAGAAGAATCCCGTGGTAACGACGACGACCACGTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACGTAACCTGCTGTCCGTTGCTTACAAAAACGTTATCGGTGCTCGTCGTGCTTCCTGG
                                                                                   GCTAACGCTGAACTGGCTCCGACCCACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCC
                                                                                                                             GAGAAGAAGAACAGTGTGGTGGAGGCCTCAGAGGCGTACAAGGAAAGCCTTCGAGATT
                                                                                                                                                                 CAGGAACGTAAAGACGCTGCTGAACACACCCTGGCTGCTTACAAATCCGCTCAGGACATC
                                                                                                                                                                                                                                       GTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCCGGT
                                                                                                                                                                                                                                                                               CTGGCGCTGCTGGACAAGTTCCTCATCAAGAACTGCAATGACTTCCAGTACGAGAGCAAG
                                                                                                                                                                                                                                                                                                           CTGAAACTGCTGGACTCCCGTCTGATC----CCGGCTGCTGCTTCCGGT--GACTCCAAA
                                                                                                                                                                                                                                                                                                                                                                                            GCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGGTCATCAGCAGCATCGAGCAGAAGACCATGGCTGATGGGAATGAGAAGAAGCTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTTTCTACTACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCT
                                                                                                                                                                                                       GTCTTCTACCTGAAGATGAAGGGCGACTACTACCGCTACCTGGCCGAGGTGGCTTCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>AFGGTTGAATTCATGGAAAAAGTTTCCGCTGCFGTTGACGGTGACGAACTGACCGTTGAA</u>
                                                   AGCAAGGAGCATGCAGCCCACACACCATCCGGCTGGGCCTGGCCCTCAACTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1696 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   33.1%; Score 260; DB 1; Lo 61.7%; Pred. No. 2.2e-64; tive 0; Mismatches 280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US 07/887,072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/08/466,444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anita M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NIH021.021A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1696;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      129
                                                                                                                           645
                                                                                                                                                                 483
                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                                                                                                                                                        465
                                                                                                                                                                                                                                                                                                                                                                                            309
                                                                                                                                                                                                                                                                                                                                                                                                                                  405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              231
                                                                                       543
                                                                                                                                                                                                     585
                                                                                                                                                                                                                                                                               525
                                                                                                                                                                                                                                                                                                                     363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69
                 603
                                                     705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     w
```

Ś 뫄 S 밁 Ş B Š

8 В Ş B Ş B Ş 片 S

밁

Ş 밁 Ş В Ş 뫄 Ő 밁

Sequence 2935, Application US/09621976

Patent No. 6639063

GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Obsert, S.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENERT.054PR2
CURRENT FILING DATE: 2000-07-21
CURRENT PILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 2935 Query Match 24.0%; Score 188.4; DB 4; Best Local Similarity 71.7%; Pred. No. 3.2e-44; Matches 274; Conservative 1; Mismatches 103; or or 724 GCTGCTGACGAAATCAA 740 912 GAAGCAGGAGAAGGCAA 928 ຫ້ TYPE: DNA

ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 123..407
NAME/KEY: misc feature
LOCATION: 427,445..446

OTHER INFORMATION: n=a, g, US-09-621-976-2935 604 664 544 485 545 605 665 8 6 8 6 8 8 장염 ઠે g 원 à g ò 쉱 ò ठ ઠે 셤 825 663 309 723 129 311 183 Sequence 7, Application US/09266225D

Patent No. 657364

GENERAL INFORMATION:
APPLICANT: Nandabalan, Krishan
APPLICANT: Kingsmore, Stephen
APPLICANT: Tchernev, Velizar
TITLE OF INVENTION: Isolation and Characterization of Hermansky-Pudlak
TITLE OF INVENTION: Interacting Protein Complexes and HPS ProteinFILE REPRESENCE: 15866-523
CURRENT APPLICATION NUMBER: US/09/266,225D
CURRENT APPLICATION NUMBER: US/09/266,225D
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 7
LENGTH: 1730 257 190 CGTATCATCTCCTCCATCGAACAAAGAATCCCGTGGTAACGACGACGACCACGTTACC 249 AGGGTCATTAGCAGCATTGAGCAGAAACCATGGCTGATGGAAACGAAAGAATTGGAG 431 AAAGTTAAAGCTTACCGGGAGAAGATTGAGAAGGAGCTGGAGACAGTTTGCAATGATGTC 491 CTGAAACTGCTGGACTCCCGTCTGATCCCG-----GCTGCTGCTTCCGGTGACTCCAAA 363 423 483 671 .69 TTCGACGACGCCATAGCCGAGCTGGACACTAAAACGAGGATTCCTATAAGGACTCCACG GAACGTAACCTGCTGCTGCTTACAAAAACGTTATCGGTGCTCGTCGTCGTCCTCCTGG TTCGACGAAGCTATCGCTGACACCCTGGGTGAAGAATCCTACAAAGACTCCACC CTGATCATGCAGCTGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGACGAC 10 GGCAGAGAAGAACTGGTTTACATGGCTAGACTGGCTGAACGTTACGAAGAA GACCGGGAGCAGCTGCTGCAGCGGGCGCGTGGCCGAGCAGCGGAGCGCTACGACGAC ATGGTTGAATTCATGGAAAAGTTTCCGCTGCTGTTGACGGTGACGAACTGACGTTGAA Aridecerecentarda Agecegrica e Agecega a realida Agecerecentario de Aridea GCTATCCGTGAATACCGTTCCAAAATCGAAACCGAACTGTCCGGTATCTGCGACGGTATC GTTTTCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGT GIGITITIACCIGAAAATGAAGGGTGATTACTACCGCTACTTAGCAGAGGTCGCTTCTGGG 424 CAGGAACGIAAAGACGCIGCIGAACACCCIGGCIGCIIAACAAAICCGCICAGGACAIC GAGAAGAAAAGCAGTGTGGAAGCTTCTGAAAGCTGCCTACAAGGAAGCCTTTGAAATC 12; Gaps Score 243.4; DB 4; Length Pred. No. 1.2e-59; 0; Mismatches 281; Indels 724 GCTGCTGACGAAATCAAAGAAGCTGCTGCGAAACCGACC 765 Query Match
Best Local Similarity 60.2%;
Matches 444; Conservative (; TYPE: DNA ; ORGANISM: Homo sapiens US-09-266-225D-7 994 664 826 886 198 70 258 130 372 250 432 310 364 552 904 604 유 ò g ò Dp ò 셤 à DP. $\dot{\delta}$ Q D Sy Gp g g ð ò

603 791 663 792 TTCGATGATGCCATAGCTGAGCTGGACACACTAAACGAGGATTCCTATAAGGACTCCACG 851 852 CTGATCATGCAGTTGCTGCGAGACAACCTCACCCTCTGGACGAGGACCAGCAGGATGAA 911 484 120 544 121 CAATGACAGAACTICCACCAACGCATCCIATICGCITAGGICTIGCTCTCAATITITICG 180 604 237 rcancanagrancecranecricancycerpagranamarchachanachecic 664 9 TGATCATGCAGCTGCTGCGTGACAACCTGACCCTGTGGACCTCCGACATGCAGGACGACG 724 732 GIGITCTACTATGAGATCCAGAATGCACCTGAGCAAGCCTGCTCTTAGCCAAACAAGCC TTCGACGAAGCTATCGCTGAGCTCGACACCCTGGGTGAAGAATCCTACAAAGACTCCACC CTGATCATGCAGCTGCGTGACAACCTGACCTGTGGACCTCCGACATGCAGGACGAC 61 CGACAGGADAGGAGGCTGCGGAGAACAGCCTAGTGGCTTATAAAGCTGCTAGTGATATTG TITICIACIACGAAATCCTGAACTCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCTT 181 TATTCTACTACGAAATTCTTAATTCCCCTGACCGTGCCTG---CTTGGCAAAAGCAGCTT GITITCIACIACGAAATCCTGAACTCCCCGGACCGTGCTTGCAACCTGGCTAAACAGGCT 1 TITCTATTATAAAATGAAAGGGGACTACCACAGGTATCTGGCAGAATTTGCCACAGGAAA 426 GGAACGTAAA-GACGCTGCTGAACACACCCCTGGCTTACAAATCCGCTCAGGACATCG CTAACGCTGAACTGGCTCCGACCCGATCCGTCTGGGTCTGGCTCTGAACTTCTCCG 366 TITCTACCTGAAAATGAAAGGTGACTACCACCGGTACCTGGCTGAGTTTAAAACCGGTCA Length Indels